```
=> file registry
COST IN U.S. DOLLARS
FULL ESTIMATED COST
```

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 17:10:08 ON 28 FEB 2008
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STRUCTURE FILE UPDATES: 27 FEB 2008 HIGHEST RN 1005551-32-5 DICTIONARY FILE UPDATES: 27 FEB 2008 HIGHEST RN 1005551-32-5

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> exp chitobiose/cn
```

EI	Т		CHITOBITTOL/CN
E2	1		CHITOBIOHYDROLASE/CN
E3	1	>	CHITOBIOSE/CN
E4	1		CHITOBIOSE 6-O-SULFOTRANSFERASE/CN
E5	1		CHITOBIOSE DIACETATE/CN
E6	1		CHITOBIOSE OCTAACETATE/CN
E7	1		CHITOBIOSE PHOSPHORYLASE/CN
E8	1		CHITOBIOSE, N,N'-DIACETYL-/CN
E9	1		CHITOBIOSE-AZELAIC ACID COPOLYMER/CN
E10	1		CHITOBIOSE-AZELAOYL CHLORIDE COPOLYMER/CN
E11	1		CHITOBIOSE-DECANEDIOIC ACID COPOLYMER/CN
E12	1		CHITOBIOSE-PENTADECANEDIOIC ACID COPOLYMER/CN
=> s E3			
L1	1	CHI	TOBIOSE/CN
=> exp chito	r:	iose,	/en

=>	exp	cnitotriose,	cn
E1		1	CHITOTRIITOL/CN
E2		1	CHITOTRIITOL, TRI-N-ACETYL-/CN
E3		1>	CHITOTRIOSE/CN
E4		1	CHITOTRIOSE UNDECAACETATE/CN
E5		1	CHITOTRIOSE, N,N',N''-TRIACETYL-/CN
E6		1	CHITOTRIOSE, TRI-N-ACETYL-/CN
E7		1	CHITOTRIOSE, TRI-N-ACETYL-, OCTAACETATE/CN
E8		1	CHITOTRIOSE-1,1',1''-3H3/CN
E9		1	CHITOTRIOSE-DODECAMETHYLENE DIISOCYANATE-EICOSANEDIOIC ACID
			COPOL-VMER / CN

E10 1 CHITOTRIOSE-DODECANEDIOIC ACID COPOLYMER/CN

```
E11 1 CHITOTRIOSE-EICOSANEDIOIC ACID COPOLYMER/CN

=> s E3

L2 1 CHITOTRIOSE/CN

=> d 11 scan
```

L1 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN D-Glucose, 2-amino-4-O-(2-amino-2-deoxy-β-D-glucopyranosy1)-2-deoxy-

MF C12 H24 N2 O9

CI COM

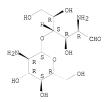
E4

E6

E7

E8

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

1

1

1

1

1

=> exp	diacetylglud	cosamine
E1	1	DIACETYLGLUCOPYRANOS/BI
E2	1	DIACETYLGLUCOPYRANOSYL/BI
E3	0>	DIACETYLGLUCOSAMINE/BI
E4	1	DIACETYLGLUTAM/BI
E5	1	DIACETYLGLUTAMIC/BI
E6	10	DIACETYLGLUTAR/BI
E7	1	DIACETYLGLUTARAMIDE/BI
E8	2	DIACETYLGLUTARATE/BI
E9	1	DIACETYLGLUTARIC/BI
E10	1	DIACETYLGLUTARO/BI
E11	1	DIACETYLGLUTAROYL/BI
E12	6	DIACETYLGLUTARYL/BI
=> exp	diacetylglud	cosamine/cn
E1	1	DIACETYLGITOXIN/CN
E2	1	DIACETYLGITOXIN F/CN
E3	0>	DIACETYLGLUCOSAMINE/CN

DIACETYLGLYCEROL/CN

DIACETYLGUAIACIN/CN

DIACETYLGUANIDINE/CN

DIACETYLGOMISIN J/CN

DIACETYLGRACILIFORMIN/CN

E9	1	DIACETYLGUGGULSTEROL Y/CN
E10	1	DIACETYLHAMACANTHIN A/CN
Ell	1	DIACETYLHAMACANTHIN B/CN
E12	1	DIACETYLHEDERAGENIN/CN

=> exp N,N'-diacetylglucosamine/cn MISMATCHED QUOTE IN EXPAND TERM Quotation marks (or apostrophes) must be used in pairs, one before and one after the expression you are setting off or masking.

=> exp N, N-diacetylglucosamine/cn

E1		1	N, N-DIACETYLDEOXONEOONCINOTINE/CN
E2		1	N, N-DIACETYLDEOXOONCINOTINE/CN
E3		0>	N, N-DIACETYLGLUCOSAMINE/CN
E4		1	N, N-DIACETYLGLUTAMIC ACID/CN
E5		1	N, N-DIACETYLHYDRAZINE/CN
E6		1	N, N-DIACETYLMALONYL DIHYDRAZIDE/CN
E7		1	N, N-DIACETYLNONANOIC ACID AMIDE/CN
E8		1	N, N-DIACETYLNORLOLINE/CN
E9		1	N, N-DIACETYLNORLOLINE PICRATE/CN
E10		1	N, N-DIACETYLSOLACASINE/CN
E11		1	N, N-DIACETYLTYRAMINE/CN

E12 1 N,N-DIALLYL A-(O-METHYLPHENOXY)PROPIONAMIDE/CN => s 12 scan

MISSING OPERATOR

=> d 12 scan

- L2 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN D-Glucose, O-2-amino-2-deoxy-β-D-glucopyranosyl-(1-4)-0-2amino-2-deoxy-β-D-glucopyranosyl-(1-4)-2-amino-2-deoxy-
- MF C18 H35 N3 O13

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d 11

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
     577-76-4 REGISTRY
RN
ED
     Entered STN: 16 Nov 1984
CN
     D-Glucose, 2-amino-4-O-(2-amino-2-deoxy-β-D-glucopyranosy1)-2-deoxy-
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Chitobiose (7CI)
CN
OTHER NAMES:
CN
     4-0-(2-Amino-2-deoxy-β-D-glucosyl)-D-glucosamine
FS
     STEREOSEARCH
     23327-39-1, 140849-41-8, 68232-34-8, 196503-39-6
DR
MF
     C12 H24 N2 O9
     COM
                 AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS,
LC.
     STN Files:
```

CASREACT, CHEMCATS, CSCHEM, MEDLINE, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
270 REFERENCES IN FILE CA (1907 TO DATE)
36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
272 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
```

=> d 12 L2 AN

```
RN 41708-93-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN D-Glucose, O-2-amino-2-deoxy-β-D-glucopyranosyl-(1→4)-0-2-
amino-2-deoxy-β-D-glucopyranosyl-(1→4)-2-amino-2-deoxy-
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Chitotriose (7CL 8CI)
```

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

CN Chitotriose (7CI, 8CI) AR 4207-52-7 FS STEREOSEARCH DR 23327-40-4

MF C18 H35 N3 O13

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

188 REFERENCES IN FILE CA (1907 TO DATE)
22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
189 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CADLD (PRIOR TO 1967)

=> exp diacetyl chitobiose/cn DIACETYL CELLULOSE/CN E1 1 E2 1 DIACETYL CHITIN/CN ΕЗ 0 --> DIACETYL CHITOBIOSE/CN E4 DIACETYL CHLORAMPHENICOL CARBOXYLESTERASE/CN 1 DIACETYL CHLORAMPHENICOL ESTERASE/CN E5 1 E6 1 DIACETYL CIRSIMARITIN/CN E7 1 DIACETYL CIRSMARITIN/CN E8 DIACETYL CUSPIDIOL/CN E9 DIACETYL DIANIL/CN E10 DIACETYL DIBUTYL STANNANE/CN E11 DIACETYL DIHYDRAZONE/CN E12 DIACETYL DIMER/CN

=> file stnguide

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 BNTRY
 SESSION

 FULL ESTIMATED COST
 16.14
 16.53

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> file hcaplus

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 FULL ESTIMATED COST
 0.18
 16.53

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FILE COVERS 1907 - 28 Feb 2008 VOL 148 ISS 9 FILE LAST UPDATED: 27 Feb 2008 (20080227/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11 or 12 or diacetylglucosamine or triacetylglucosamine

272 L1 189 L2

3 DIACETYLGLUCOSAMINE

13 TRIACETYLGLUCOSAMINE

357 L1 OR L2 OR DIACETYLGLUCOSAMINE OR TRIACETYLGLUCOSAMINE

=> s SIRS or (systemic inflammatory response) or sepsis or septic

1003 SIRS

110508 SYSTEMIC

198863 INFLAMMATORY

1643120 RESPONSE

2176 SYSTEMIC INFLAMMATORY RESPONSE

(SYSTEMIC (W) INFLAMMATORY (W) RESPONSE)

16790 SEPSIS

14461 SEPTIC

27811 SIRS OR (SYSTEMIC INFLAMMATORY RESPONSE) OR SEPSIS OR SEPTIC

=> s 13 and 14

L5 2 L3 AND L4

=> s 15 and (PY<2003 or AY<2003 or PRY<2003)

22929010 PY<2003 4478548 AY<2003

3953774 PRY<2003 0 L5 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide

L6

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 2.69 19.22

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d 15 1-2 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y) /N:y

- L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods of treating inflammation
- AB Methods and compos. for treating myocardial dysfunction or inflammation are described. The methods of the invention involve administering an agent that can inhibit lysozyme to an animal in need thereof. Preferred lysozyme inhibitors include TAC (N,N',N"-triacetylglucosamine, chitotriose) and chitobiose.
- AN 2004:905606 HCAPLUS <<LOGINID::20080228>>
- DN 141:360677
 - I Methods of treating inflammation
- IN Mink, Steven N.; Jacobs, Hans; Bose, Deepak; Duke, Krika; Light, R. Bruce
- PA Can. SO U.S. Pat. App.
- SO U.S. Pat. Appl. Publ., 70 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	PA:	TENT NO.	KIND	DATE	API	PLICATION NO.	DATE		
PI	US	2004214792	A1	20041028	US	2004-762581	20040123		
	CA	2428744	A1	20040724	CA	2003-2428744	20030512		
PRAI	US	2003-442060P	P	20030124					

- L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs
- AB OBJECTIVE: Reversible myocardial depression in sepsis has been ascribed to the release of inflammatory mediators. We recently found that lysozyme c (Lzm-S), consistent with that originating from the spleen, was a mediator of myocardial depression in an Escherichia coli model of septic shock in dogs. We further showed in a right ventricular trabecular (RVT) preparation that Lzm-S's depressant activity could be blocked by N,N',N" triacetylglucosamine (TAC), a competitive inhibitor of Lzm-S. We hypothesized that Lzm-S binds to or cleaves a cardiac membrane glycoprotein, thereby interfering with myocardial contraction in sepsis. In the present study, we examined whether TAC could prevent myocardial depression in an in vivo preparation and whether other related N-acetylglucosamine (NAG) structures could also inhibit Lzm-S's effect in RVT. DESIGN: Randomized exptl. study. SETTING: University laboratory SUBJECTS: Anesthetized, mech. ventilated dogs. INTERVENTIONS: We produced sepsis by infusion of E. coli over an approx. 6-h period. MEASUREMENTS AND MAIN RESULTS: We examined the effect of TAC on stroke work, our primary index of myocardial function, when treatment was administered before sepsis (pretreatment) and after 1.5 h (early treatment study) and 3.5 h of sepsis (late treatment study; LTS). In the pretreatment study and early treatment study, myocardial depression would have not yet occurred but would have already been present in the late treatment study. In RVT, we assessed the effect of other NAG oligosaccharides and variants to the NAG structure on Lzm-S's depressant activity. In pretreatment and the early treatment study, TAC prevented

the reduction in stroke work observed in nontreated septic groups but did not reverse the reduction found in the late treatment study. In RVT, of the compds. tested, only N,N'-diacetylglucosamine showed an inhibitory effect. CONCLUSIONS: We found that TAC, a competitive inhibitor of Lzm-S, prevented myocardial depression in exptl. sepsis. Only specific NAG structures are inhibitory to Lzm-S's depressant activity. TAC may be useful in attenuating cardiovascular collapse in sepsis.

2004:10964 HCAPLUS <<LOGINID::20080228>> AN

DN 141:133790

ΤI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs

- AU Mink, Steven N.; Jacobs, Hans; Duke, Krika; Bose, Deepak; Cheng, Zhao-Qin; Light, R. Bruce Departments of Pharmacology and Therapeutics, University of Manitoba,
- Winnipeg, MB, R3E 0Z3, Can. Critical Care Medicine (2004), 32(1), 184-193 SO
- CODEN: CCMDC7; ISSN: 0090-3493
- PB Lippincott Williams & Wilkins
- DT Journal
- English LA

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file hcaplus COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 0.12	SESSION 27.91
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s inflamm? or antiinflamm? or antibacterial

305729 INFLAMM?

```
102327 ANTIBACTERIAL
        409786 INFLAMM? OR ANTIINFLAMM? OR ANTIBACTERIAL
=> s 13 and 17
           12 L3 AND L7
L8
=> fiel stnquide
FIEL IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> s 18 and (PY<2003 or AY<2003 or PRY<2003)
      22929010 PY<2003
       4478548 AY<2003
       3953774 PRY<2003
1.9
             7 L8 AND (PY<2003 OR AY<2003 OR PRY<2003)
=> d 19 1-7 ti abs bib
     ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
     Combination of amino sugars and cysteine or cysteine derivatives
AB
     The present invention relates to chemical complexes consisting of cysteine or
     derivs. of cysteine and an aminosugar as well as pharmaceutical compns.
     and dietary supplements comprising such complexes. The invention further
     relates to the use of such compns. or complexes for the preparation of a
     medicament or a dietary supplement in the suppression of hypersensitivity
     and inflammatory reactions such as rheumatic or dermatol.
     disorders or to a method of treating such diseases by administering such
     compns. and complexes. Capsules contain an example complex formed from
     N-acetylcysteine and glucosamine sulfate. A complex of N-acetylcysteini
     with glucosamine K sulfate salt had an anti-inflammatory effect
     in the carrageenin-induced paw edema test in rats.
AN
    2003:22691 HCAPLUS <<LOGINID::20080228>>
DN
    138:78479
ΤI
     Combination of amino sugars and cysteine or cysteine derivatives
IN Weidner, Morten Sloth
    Astion A/S, Den.
PA
SO PCT Int. Appl., 54 pp.
```

55586 ANTIINFLAMM?

CODEN: PIXXD2

Patent.

DT

LA English

FAN.	CNT	1																	
	PA'	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE		
							_									-			
PI	WO	2003	0021	25		A2		2003	0109		WO 2	002-	DK44	6		2	0020	628 <	
	WO	2003	0021	25		A3		2003	1106										
	WO	2003	0021	25		В1		2004	0521										
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw								
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
			KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	
			GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	
			GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								

		2002319110 2003162732	A1 A1	20030303 20030828		2002-319110 2002-185982	20020628 <
PRAI	DK	2001-1038	A	20010629	<		
1	DK	2001-1056	A	20010704	<		
1	US	2001-303298P	P	20010705	<		
1	WO	2002-DK446	W	20020628	<		

- L9 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Chlamydia oligosaccharides
- The Carbohydrate moieties of the major outer membrane protein (MOMP) which are involved in the attachment of C. trachomatis and other chlamydiae to host mammalian cells can be used to block attachment and infectivity of chlamydiae. Thus, among the objects of the instant invention are the identification of the relevant oligosaccharides which mediate the binding of various chlamydiae to mammalian cells, which mediate the infectivity of various chlamydiae in mammalian cells, compns. comprising same and methods for using same ato block binding of and infectivity of chlamydiae in a host. Those and other objects of the instant invention have been attained by the discovery of novel N-linked structures in chlamydiae MOMP, of a "high mannose-type" which mediate binding of chlamydiae to mammalian host cells. Thus, the instant invention includes compns. and methods for precluding attachment of chlamydiae to host cells.
- AN 2002:315462 HCAPLUS <<LOGINID::20080228>>
- DN 136:335216
 - TI Chlamydia oligosaccharides
- IN Kuo, Cho-chou; Swanson, Albertina F.; Hakomori, Senitiroh; Takahashi, Noriko
- PA USA
- SO U.S. Pat. Appl. Publ., 18 pp., Cont. of U.S. Ser. No. 230,346. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 2002049172	A1	20020425	US 2001-950684	20010913 <		
	US 2002173483	A1	20021121	US 1999-230346	19990219 <		
	US 2004121984	A1	20040624	US 2003-714842	20031118 <		
PRAI	US 1999-230346	A1	19990219	<			
	US 1996-672849	B2	19960725	<			
	WO 1997-US13037	W	19970725	<			
	US 2001-950684	B1	20010913	<			

- L9 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Treatment of C. difficile toxin B associated conditions
- AB This invention relates to prevention and/or treatment of antibiotic associated diarrhea, including Clostridium difficile associated diarrhea (CDAD),

pseudomembranous colitis (PMC) and other conditions associated with C. difficile infection, using oligosaccharide compns, which bind C. difficile toxin B. More specifically, the invention concerns neutralization of C. difficile toxin B associated with such conditions. Examples are provided on neutralization of C. difficile toxins A and B by SYNSORBs and on effect of preincubation of toxin B with SYNSORBs on transepithelial resistance in human colonic tissue.

- AN 2002:213816 HCAPLUS <<LOGINID::20080228>>
- DN 136:241677
- TI Treatment of C. difficile toxin B associated conditions
- IN Heerze, Louis D.; Armstrong, Glen D.
- PA Synsorb Biotech Inc., Can.
- SO U.S., 14 pp., Cont.-in-part of U.S. 6,013,635.

CODEN: USXXAM

Patent DT LA. English

FAN.CNT 3

PATENT NO. KIND DATE APPLICATION NO. DATE PΙ US 6358930 B1 20020319 US 1999-433944 19991104 <--20000111 US 1998-85032 US 6013635 A 19980528 <--19990527 <--EP 1704865 A2 20060927 EP 2006-9088 A3 20061206 EP 1704865 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL US 6107282 A 20000822 US 1999-419790 19991018 <--US 6465435 B1 20021015 US 2000-593040 20000613 <--CA 2388187 A1 20010510 CA 2000-2388187 20001103 <--WO 2001032219 A2 20010510 WO 2001032219 A3 20020404 WO 2000-CA1312 20001103 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU. ZA. ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG A2 20021023 EP 2000-974214 EP 1250153 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 1998-85032 A2 19980528 <-EP 1999-924602 A3 19990527 <-JP 2000-550491 A3 19990527 <-US 1999-419790 A1 19991018 <-US 1999-433944 A 19991104 <-US 1999-64504 A 1999104 <-US 1999-64504 A 1999104 <--JP 2003513051 T 20030408 JP 2001-534423 20001103 <--JP 2006213735 A 20060817 JP 2006-136969 20060516 <--PRAI US 1998-85032

RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 1.9 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- Chlamydia mannose-containing oligosaccharides, and use in inhibiting ΤI chlamydial infectivity
- AB Mannose-containing, branched oligosaccharides mediate binding of chlamydia to mammalian cells. The "high mannose-type" glycan was found to block adhesion of chlamydiae to mammalian cells and thus to inhibit infectivity. The glycan and its mimetics, including multivalent derivs., can be used as agents for treatment or prevention of chlamydia-based human diseases.
- 1998:98333 HCAPLUS <<LOGINID::20080228>> AN
- DN 128:188617
- ΤI Chlamydia mannose-containing oligosaccharides, and use in inhibiting chlamydial infectivity
- IN Takahashi, Noriko; Kuo, Cho-Chou; Swanson, Albertina F.; Hakomori, Sen-Itiroh
 - Biomembrane Institute, USA; University of Washington
- PCT Int. Appl., 41 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

PΙ	WO	9804272	1	λ1	19980205	WO	1997-US13	037	19970725 <
		W: CA, JP,	US						
		RW: AT, BE,	CH, D	E, DK	, ES, FI,	FR, GE	GR, IE,	IT, LU,	MC, NL, PT, SE
	US	2002173483	1	A1	20021121	US	1999-2303	46	19990219 <
	US	2003139375		11	20030724	US	2002-2875	87	20021105 <
	US	2004121984		1	20040624	US	2003-7148	42	20031118 <
	US	2004138173	1	11	20040715	US	2003-7322	81	20031211 <
	US	7053067	1	32	20060530				
	US	2006183710	1	1	20060817	US	2006-3763	37	20060316 <
PRAI	US	1996-672849		12	19960725	<			
	WO	1997-US13037	1	Ī	19970725	<			
	US	1999-230346	1	31	19990219	<			
	US	2001-950684	1	31	20010913	<			
	US	2002-287587	1	31	20021105	<			
	US	2003-732281		43	20031211				
RE.CI	IΤ	7 THERE	ARE 7	CITED	REFERENCE	ES AVAI	LABLE FOR	THIS RE	CORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- Human antilipid A monoclonal antibodies bind to human B cells and the i antigen on cord red blood cells
- AB The authors describe two independently derived human mAb. A6(H4C5) and 216, initially selected for their reactivity to the lipid A domain of bacterial LPS, which also react with the following Ag: the i Ag present on cord RBC, a ligand on human B lymphocytes, and to certain autoantigens, defining these mAb as polyreactive. Both mAb have specific affinity for a carbohydrate epitope consisting minimally of a disaccharide with an acyl substitution at the 2-carbon position. Structural examination of the diverse Ag recognized by the two antibodies reveals the presence of this carbohydrate structure required for antibody binding. A6(H4C5) and 216 are IgM of isotype, but differ in their L chain expression. Mol. anal. shows that both mAb are encoded by a highly conserved VH4 gene, designated VH4-21. This gene encodes a number of autoantibodies, particularly cold agglutinins. Specific recognition of lipid A and of a carbohydrate epitope on B-lymphocytes by the two human mAb suggests a dual function for the highly conserved VH4-21 gene in antibacterial response and
 - in B cell development and regulation. 1994:6474 HCAPLUS <<LOGINID::20080228>>
- AN DN 120:6474
- Human antilipid A monoclonal antibodies bind to human B cells and the i antigen on cord red blood cells
- AU Bhat, Neelima M.; Bieber, Marcia M.; Chapman, C. J.; Stevenson, Fred K.; Teng, Nelson N. H.
- CS Dep. Gynecol. Obstet., Stanford Med. Cent., Stanford, CA, USA
- SO Journal of Immunology (1993), 151, 5011-21
 - CODEN: JOIMA3: ISSN: 0022-1767
- DT Journal
- LA English
- ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN L9
- Novel glucosamine derivative and liposome containing the same as membrane component

AB Glucosamine derivs. [I; R1, R2 = H, CO(CH2)nMe; n = 10-22; provided that R1 = R2 \neq H; R3 = H, lower alkyl; m = 0-3], also useful as cationic surfactants and adjuvants for preparation of antibodies, are prepared A liposome

Ι

consists of I, a sterol-series stabilizer, and/or an antioxidant, and phospholipid as membrane components and encapsulates a physiol. active substance, e.g. an antiinflammatory agent, 0-carrier, enzyme, antibiotic, hormone, anticancer agent, and particularly superoxide dismutase (SOD). Thus, 9.3 g Me N-benzyloxycarbonyl-D-glucosaminide was stirred with palmitoyl chloride in pyridine for 24 h at room temperature to

aive

52% Me N-benzyloxycarbonyl-6-O-palmitoyl-D-glucosaminide which was hydrogenolized over 5% Pd/C in MeOH to give 85% Me 6-O-palmitoyl-D-glucosaminide (II). A liposome consisting of phosphatidylcholine, cholesterol, and II (7:2:1) showed 40.0% encapsulation rate of SOD vs. 3.2% when a liposome without II was used.

AN 1991:515012 HCAPLUS <<LOGINID::20080228>> DN 115:115012

TI Novel glucosamine derivative and liposome containing the same as membrane component

IN Miyajima, Koichiro; Fuji, Kaoru

PA Japan Tobacco, Inc., Japan

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT

FAN.	PATENT NO.					KIND		DATE	DATE		APPLICATION NO.			DATE	
PI	WO 9107416 W: CA, KR, US			A1		1991	19910530		WO	1990-JP1458	1990110		<		
		RW:				FR,	GB,	, GR,	IT,	SE					
	JP	03218	389			A		1991	0925		JP	1990-281988		19901022	<
	JP	04159	216			A		1992	0602		JP	1990-281989		19901022	<
	CA	20455	50			A1		1991	0510		CA	1990-2045550		19901109	<
	EP	45791	0			A1		1991	1127		EP	1990-916363		19901109	<
		R: 1													
	WO	92069	87			A1		1992	0430		WO	1990-JP1506		19901119	<
		RW:													
		53043				A					US	1992-895444		19920608	<
PRAI		1989-				A		1989	1109	<-					
		1990-				A			1022						
		1990-				A			1022						
		1990-						1990	1109	<-					
		1991-				B1		1991	0709	<-					
os	MA	RPAT 1	15:	1150	12										

- L9 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Potential role of lysozyme in bactericidal activity of in vitro-acquired

salivary pellicle against Streptococcus faecium 9790 The adherence of S. faecium 9790 to hydroxyapatite (HA) coated with whole human saliva supernatant proteins (S-HA) or parotid fluid proteins was studied. The organism was labeled with [3H]thymidine, and adherence was

estimated as the radioactivity remaining associated with the variously coated

prepns. after incubation and removal of unbound microbes by washing the adherence substratum. Adherence was time dependent and saturable, characteristics typical of oral streptococci in this in vitro adherence model system. However, adherence to S-HA, but not bare HA, was decreased 20-fold at 4° compared with room temperature Furthermore, adherence at 4° to S-HA was decreased 20-fold relative to bare HA at 4°. Adherence to HA coated with parotid fluid proteins also was reduced at 4°. The magnitude of the temperature dependence and the inhibitory effect at 40 of whole saliva or parotid fluid pellicles on HA was unexpected. Of several sugars and amino sugars tested, the chitin saccharides, chitotriose, chitobiose, and N-acetylglucosamine, caused >90% inhibition of adherence to S-HA. These same saccharides were previously shown to inhibit lysozyme, polylysine, or autolytic lysis of the organism (N. J. Laible and G. R. Germaine, 1985). Examination of unbound and adherent microbes revealed that lysis of the organism occurred during the adherence assays. A strong association between the extent of lysis and the extent of adherence was found under a variety of conditions. Depletion of lysozyme from saliva specimens used to coat HA resulted in a >90% decrease in both cell lysis and adherence. Lysis of the microbe appeared dependent upon the presence of the saliva pellicle (coating) on HA, since solns. containing proteins desorbed from HA during mock-adherence incubations possessed lytic activity that was 2-10-fold too low to account for the extents of lysis observed with ≥108 input cells. These results demonstrate the potential antibacterial activity of acquired salivary pellicle on enamel in vivo and the likely role of lysozyme in this activity. The data also serve to caution that this widely used in vitro adherence model will not distinguish whole-cell adherence from the adsorption of radiolabeled DNA released from lysing cells. Several addnl. controls are suggested that will indicate whether test microbes remain intact or lyse during adherence trials.

AN 1987:48488 HCAPLUS <<LOGINID::20080228>>

DN 106:48488

AB

ΤI Potential role of lysozyme in bactericidal activity of in vitro-acquired salivary pellicle against Streptococcus faecium 9790

AU Germaine, Greg R.; Tellefson, Lois M.

CS Sch. Dent., Univ. Minnesota, Minneapolis, MN, 55455, USA

SO Infection and Immunity (1986), 54(3), 846-54

CODEN: INFIBR; ISSN: 0019-9567 DT Journal

T.A English

=> file stnguide COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 23.06 50.97 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -5.60 -7.20

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FILE CONTAINS CURRENT INFORMATION.
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=> d his

(FILE 'HOME' ENTERED AT 17:09:55 ON 28 FEB 2008)

FILE 'REGISTRY' ENTERED AT 17:10:08 ON 28 FEB 2008

EXP CHITOBIOSE/CN

L1 1 S E3
EXP CHITOTRIOSE/CN

L2 1 S E3

EXP DIACETYLGLUCOSAMINE EXP DIACETYLGLUCOSAMINE/CN

EXP DIACETYLGLUCOSAMINE/CN EXP N,N-DIACETYLGLUCOSAMINE/CN

EXP DIACETYL CHITOBIOSE/CN

FILE 'STNGUIDE' ENTERED AT 17:12:35 ON 28 FEB 2008

FILE 'HCAPLUS' ENTERED AT 17:14:05 ON 28 FEB 2008

L3 357 S L1 OR L2 OR DIACETYLGLUCOSAMINE OR TRIACETYLGLUCOSAMINE
L4 27811 S SIRS OR (SYSTEMIC INFLAMMATORY RESPONSE) OR SEPSIS OR SEPTIC

L5 2 S L3 AND L4

L6 0 S L5 AND CPY<2003 OR AY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 17:14:13 ON 28 FEB 2008

FILE SINGOIDE ENIERED AT 17.14.13 ON 20 FEB 2000

FILE 'HCAPLUS' ENTERED AT 17:14:24 ON 28 FEB 2008

FILE 'STNGUIDE' ENTERED AT 17:14:24 ON 28 FEB 2008

FILE 'HCAPLUS' ENTERED AT 17:15:22 ON 28 FEB 2008 L7 409786 S INFLAMM? OR ANTIINFLAMM? OR ANTIBACTERIAL

L8 12 S L3 AND L7

L9 7 S L8 AND (PY<2003 OR AY<2003 OR PRY<2003)
FILE 'STNGUIDE' ENTERED AT 17:15:54 ON 28 FEB 2008

=> log hold

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.06 51.03

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

-7.20

CA SUBSCRIBER PRICE 0.00

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DICTIONARY FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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http://www.cas.org/support/stngen/stndoc/properties.html

=> s chitobiose/cn

L1 1 CHITOBIOSE/CN

=> s chitotriose/cn

L2 1 CHITOTRIOSE/CN

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 10.76 10.97

FULL ESTIMATED COST

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FILE COVERS 1907 - 29 Feb 2008 VOL 148 ISS 10 FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

- => s 11 or 12 or diacetylglucosamine or triacetylglucosamine 272 L1 189 L2
 - 3 DIACETYLGLUCOSAMINE
 - 13 TRIACETYLGLUCOSAMINE

=> s lysozyme L4 30943 LYSOZYME

=> s 13 and 14 L5 61 L3 AND L4

=> s 15 and (PY<2003 or AY<2003 or PRY<2003) 22929004 PY<2003 4478702 AY<2003

3953937 PRY<2003 L6 53 L5 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 ENTRY
 SESSION

 FULL ESTIMATED COST
 5.38
 16.35

FILE 'SINGUIDE' ENTERED AT 08:48:34 ON 29 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
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=> file hcaplus

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 FULL ESTIMATED COST
 0.12
 16.47

FILE 'HCAPLUS' ENTERED AT 08:49:38 ON 29 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 29 Feb 2008 VOL 148 ISS 10 FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (triacetyl chitotriose)

2944 TRIACETYL 295 CHITOTRIOSE

11 (TRIACETYL CHITOTRIOSE) (TRIACETYL(W)CHITOTRIOSE) => file stnquide

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 08:49:39 ON 29 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d 17 1-11 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y) /N:y

- L7 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Target-Specific Chemical Acylation of Lectins by Ligand-Tethered DMAP Catalysts
- L7 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Legionella pneumophila type II secretome reveals unique exoproteins and a chitinase that promotes bacterial persistence in the lung

2.69

19.16

- L7 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI A Fluorescent Lectin Array Using Supramolecular Hydrogel for Simple Detection and Pattern Profiling for Various Glycoconjugates
- L7 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Solution- and bound-state conformational study of N,N',N''triacetyl chitotriose and other analogous potential inhibitors of hevamine: Application of trNOSSY and STD NMR spectroscopy
- L7 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI An α-lactalbumin (12His → Leu, 33Thr → Glu,
 - 103Tyr-Ala) mutant acquiring partial activity of lysozyme
- L7 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI 1H NMR study of the interaction of N,N',N''-triacetyl chitotriose with Ac-AMP2, a sugar binding antimicrobial protein isolated from Amaranthus caudatus
- L7 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Structural modifications in Rhizobium meliloti Nod factors influence their stability against hydrolysis by root chitinases
- L7 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI inhibition of chitinolytic enzymes from Streptomyces griseus (Bacteria), Artemia salina (Crustacea), and a cell line from Chironomus tentans (Insecta) by allosamidin and isoallosamidin
- L7 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Solanum tuberosum agglutinin accumulation during tuber development
- L7 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Properties of potato lectin fractions isolated from different parts of the tuber and their effect on the growth of Phytophthora infestans

- L7 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Electron microscopic localization of chitin using colloidal gold labeled with wheat germ agglutinin

=> log hold
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.06 25.93

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 08:50:07 ON 29 FEB 2008

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Welcome to STN International! Enter x:x

LOGINID: SSPTAEX01623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * *
SESSION RESUMED IN FILE 'STNGUIDE' AT 08:59:24 ON 29 FEB 2008
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=>
Uploading C:\Program Files\Stnexp\Oueries\10762581chitobiose.str
chain nodes :
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-14 1-37 2-21 2-38 3-22 3-39 4-25 4-40 6-13 6-36 7-15 7-30 8-20 8-29 9-13 9-27 10-26 10-28 12-31 14-16 14-18 15-17 15-19 20-33 21-34 22-35
23-25 23-41
24-26 24-42 31-32
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
1-2 1-6 1-14 2-3 2-21 3-4 3-22 4-5 5-6 6-13 7-8 7-12 7-15 8-9 8-20
9-10 9-13 10-11 11-12 12-31 14-18 15-19
exact bonds :
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20-33 21-34 22-35 23-25 23-41 24-26 24-42 31-32
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS
30:CLASS
31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS
39:CLASS 40:CLASS
41:CLASS 42:CLASS
```

L8 STRUCTURE UPLOADED

=> s 18
SAMPLE SEARCH INITIATED 08:59:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 738 TO ITERATE

100.0% PROCESSED 738 ITERATIONS SEARCH TIME: 00.00.01

```
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 13131 TO 1638
PROJECTED ANSWERS: 0 TO 0
```

L9 0 SEA SSS SAM L8

=> s 18 fam full FULL SEARCH INITIATED 08:59:53 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1796 TO ITERATE

100.0% PROCESSED 1796 ITERATIONS SEARCH TIME: 00.00.01 24 ANSWERS

L10 24 SEA FAM FUL L8

=> d 110 scan

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

A-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxyB-D-galactopyranosyl]-2-deoxy
MF C16 H28 N2 011

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

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L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
D-Galactiol, O-2-(acety]amino)-2-deoxy-α-D-galactopyranosyl-
(1+2)-0-6-deoxy-α-L-galactopyranosyl-[1+3 (or 1+4)]-0-(0-2-(acety]amino)-2-deoxy-β-D-galactopyranosyl-
[1+4)-2-(acety]amino)-2-deoxy-β-D-galactopyranosyl-
[1+4 (or 1+3)]]-0-2-(acety]amino)-2-deoxy-β-D-glucopyranosyl-[1+3 (or 1+3)]]-2-(acety]amino)-2-deoxy-β-D-galactopyranosyl-[1+3 (or 1+3)]]-2-(acety]amino)-2-deoxy-
(9C1)

MF C52 H89 N5 034
CI IDS
CM 1
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CM 2

Absolute stereochemistry.

CM 3

Absolute stereochemistry.

CM 4

CM 5

Absolute stereochemistry.

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

Absolute stereochemistry.

● H2O

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Glucopyranose, 2-acetamido-4-0-(2-acetamido-2-deoxy- β -D-glucopyranosy1-2-deoxy1- (7CI) MF C16 H28 N2 011

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):- '-' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "O", or "END". HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d 110 1

- L10 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 952753-71-8 REGISTRY
- ED Entered STN: 09 Nov 2007
- CN β -D-Glucopyranose, 2-(acetyl-2,2,2-d3-amino)-4-O-[2-(acetyl-2,2,2-d3
 - amino)-2-deoxy-β-D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C16 H22 D6 N2 O11 SR CA
- LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 110 2-24

L10 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 914671-16-2 REGISTRY

ED Entered STN: 04 Dec 2006

a-D-Galactopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-CN

B-D-galactopyranosyll-2-deoxy- (CA INDEX NAME)

FS STEREOSEARCH MF

C16 H28 N2 O11

SR CA

LC. STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L10 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 904747-16-6 REGISTRY
- ED Entered STN: 28 Aug 2006
- CN Glucopyranose, 2-acetamido-4-0-(2-acetamido-2-deoxy-β-D-
- glucopyranosyl-2-deoxyl- (7CI) (CA INDEX NAME)
- FS STEREOSEARCH MF C16 H28 N2 O11
- SR CAS EARLY REGISTRATIONS
- LC STN Files: CA, CAPLUS

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
```

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

307345-25-1 REGISTRY RN

Entered STN: 07 Dec 2000 ED CN D-Glucose, O-6-deoxy- α -L-galactopyranosyl-(1 \rightarrow 6)-O-[O- β -Dgalactopyranosyl- $(1\rightarrow 4)$ -0-2-(acetylamino)-2- $deoxy-\beta$ -Dglucopyranosyl- $(1\rightarrow 4)$ -O- α -D-mannopyranosyl- $(1\rightarrow 3)$ -O- $[\alpha-D-mannopyranosyl-(1\rightarrow6)]-O-\beta-D-mannopyranosyl (1\rightarrow 4)$ -2-(acetylamino)-2-deoxy- β -D-glucopyranosyl-(1 $\rightarrow 4$)]-2-(acetylamino)-2-deoxy-, mono[2-(acetylamino)-4-0-[2-(acetylamino)-2deoxy-β-D-galactopyranosyl]-2-deoxy-β-D glucopyranoside] mono[2-(acetylamino)-2-deoxy-4-0- β -D-galactopyranosyl- β -Dglucopyranoside] (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C84 H140 N6 O60 IDS

CA SR LC

STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8

CMF C16 H28 N2 O11

Absolute stereochemistry.

CM 2

CRN 125848-16-0 CMF C54 H91 N3 O40

PAGE 1-B

CM 3

CRN 47491-70-3 CMF C14 H25 N O11

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L10 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
```

RN 304682-24-4 REGISTRY

ED Entered STN: 28 Nov 2000

CN D-Glucose, O-2-(acetylamino)-2-deoxy-β-D-galactopyranosyl-

(1→4)-0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-

 $(1\rightarrow 2)-O-\alpha-D-mannopyranosyl-[1\rightarrow 3 (or$

1→6)]-O-[α -D-mannopyranosyl-[1→6 (or 1→3)]]-O- β -D-mannopyranosyl-(1→4)-O-2-(acetylamino)-2-

deoxy-β-D-glucopyranosyl-(1-4)-0-[6-deoxy-α-L-

galactopyranosyl-(1>6)]-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C56 H94 N4 O40

CI IDS

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8 CMF C16 H28 N2 O11

Absolute stereochemistry.

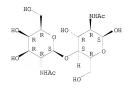
CM :

CRN 110387-51-4 CMF C40 H68 N2 O30 Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L10 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 174292-44-5 REGISTRY
- ED Entered STN: 19 Mar 1996
- CN α -D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-
- β-D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C16 H28 N2 O11
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN RN $171484{-}22{-}3$ REGISTRY

```
Entered STN: 19 Dec 1995
CN
     β-D-Allopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-β-
     D-allopyranosyl]-2-deoxy- (CA INDEX NAME)
FS
     STEREOSEARCH
    C16 H28 N2 O11
MF
SR
    CA
LC
     STN Files:
                CA, CAPLUS, CASREACT
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
```

L10 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 148682-84-2 REGISTRY

ED Entered STN: 15 Jul 1993

CN D-Glucose, 0-2-(acetylamino)-2-deoxy-β-D-galactopyranosyl-(1→4)-0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl- $(1\rightarrow6)-0-[0-\beta-D-galactopyranosyl-(1\rightarrow4)-2-(acetylamino)-2$ deoxy- β -D-glucopyranosyl-(1+2)]-0- α -D-mannopyranosyl- $[1\rightarrow 3 \text{ (or } 1\rightarrow 6)]-0-[0-\beta-D-\text{galactopyranosyl-}(1\rightarrow 4)-0-$ 2-(acetylamino)-2-deoxy- β -D-glucopyranosyl-(1+2)- α -Dmannopyranosyl-[1→6 (or 1→3)]]-O-β-D-mannopyranosyl-(1→4)-0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME) FS STEREOSEARCH

MF C78 H130 N6 O56

IDS

SR CA

STN Files: CA, CAPLUS

CM

CRN 148682-80-8 CMF C16 H28 N2 O11

CM 2

CRN 71496-53-2 CMF C62 H104 N4 O46

PAGE 2-B

CHO

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 148682-81-9 REGISTRY

Entered STN: 15 Jul 1993

ED D-Glucose, O-2-(acetylamino)-2-deoxy-β-D-galactopyranosyl-CN (1→4)-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl- $(1\rightarrow6)-0-[0-\beta-D-galactopyranosyl-(1\rightarrow4)-2-(acetylamino)-2$ $deoxy-\beta-D-glucopyranosyl-(1\rightarrow2)]-O-\alpha-D-mannopyranosyl [1\rightarrow3 (\text{or } 1\rightarrow6)]-0-[0-\beta-D-\text{galactopyranosyl-}(1\rightarrow4)-0-$ 2-(acetylamino)-2-deoxy- β -D-glucopyranosyl-(1 \rightarrow 2)- α -Dmannopyranosyl-[1 \rightarrow 6(or 1 \rightarrow 3)]]-O- β -D-mannopyranosyl- $(1\rightarrow 4)-0-2-(acetylamino)-2-deoxy-\beta-D-glucopyranosyl (1\rightarrow 4)-0-[6-deoxy-\alpha-L-galactopyranosyl-(1\rightarrow 6)]-2-$ (acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C84 H140 N6 O60

CI IDS SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8 CMF C16 H28 N2 O11

Absolute stereochemistry.

CM

CRN 78392-81-1 CMF C68 H114 N4 O50

но

PAGE 2-B

- 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L10 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 148682-80-8 REGISTRY
- ED Entered STN: 15 Jul 1993
- CN β-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-
- β-D-galactopyranosyl]-2-deoxy- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH

MF C16 H28 N2 O11

CI COM

SR CA

STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)
10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 145841-62-9 REGISTRY

ED Entered STN: 11 Feb 1993

CN β-D-Mannopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-

α-D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)

FS STEREOSEARCH

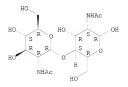
MF C16 H28 N2 O11

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L10 ANSWER 12 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
RN
     141725-02-2 REGISTRY
ED
     Entered STN: 12 Jun 1992
CN
    α-D-Galactopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-
     α-D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)
     STEREOSEARCH
MF
     C16 H28 N2 O11
SR
    CA
LC
                 BEILSTEIN*, CA, CAPLUS
     STN Files:
         (*File contains numerically searchable property data)
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
```

L10 ANSWER 13 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN RN 125760-95-4 REGISTRY

ED Entered STN: 09 Mar 1990

 $\begin{array}{lll} D\mbox{-}Galactitol, & O\mbox{-}2-(acetylamino)\mbox{-}2-deoxy-α-}D\mbox{-}galactopyranosyl-(1+2)\mbox{-}0-(acetylamino)\mbox{-}2-deoxy-β-}D\mbox{-}galactopyranosyl-(1+4)\mbox{-}2-(acetylamino)\mbox{-}2-deoxy-β-}D\mbox{-}galactopyranosyl-(1+4)\mbox{-}2-(acetylamino)\mbox{-}2-deoxy-β-}D\mbox{-}galactopyranosyl-(1+3)(or\mbox{-}1+6)\mbox{-}0-(6-deoxy-α-}D\mbox{-}galactopyranosyl-(1+3)\mbox{-}(or\mbox{-}1+6)\mbox{-}0-(6-deoxy-α-}D\mbox{-}Galactopyranosyl-(1+6)\mbox{-}0-(acetylamino)\mbox{-}2-deoxy-(9CI)\mbox{-}(CA\mbox{-}NDEX\mbox{-}NAME) \end{array}$

FS STEREOSEARCH

MF C52 H89 N5 O34

CI IDS SR CA

CN

LC STN Files: CA, CAPLUS

CM 1

CRN 125760-94-3 CMF C16 H28 N2 O11

CM 2

CRN 125668-51-1 CMF C14 H25 N O10

Absolute stereochemistry.

CM 3

CRN 14131-68-1 CMF C8 H15 N O6

Absolute stereochemistry.

CM 4

CRN 10486-91-6 CMF C8 H17 N O6 Absolute stereochemistry.

CM 5

CRN 6696-41-9 CMF C6 H12 O5

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 14 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 125760-94-3 REGISTRY

ED Entered STN: 09 Mar 1990

CN β-D-Galactopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxyβ-D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)

β-D-galactopyranosyl]-2-deoxy- (CA INDEX NAME) STEREOSEARCH

FS STEREOSEARCH MF C16 H28 N2 O11

CI COM

SR CA

STN Files: BEILSTEIN*

(*File contains numerically searchable property data)

- L10 ANSWER 15 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 119719-43-6 REGISTRY
- ED Entered STN: 24 Mar 1989
- CN β-D-Galactopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy
 - α-D-galactopyranosyll-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C16 H28 N2 O11
- SR CA
- LC STN Files: BEILSTEIN*, CA, CAPLUS
 - (*File contains numerically searchable property data)

Absolute stereochemistry.

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L10 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 116373-02-5 REGISTRY
- ED Entered STN: 17 Sep 1988
- CN α-Neuraminic acid, 0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-
- (1→?)-N-acetyl- (9CI) (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- CN D-glycero-a-D-galacto-2-Nonulopyranosonic acid, 0-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl-(1-4)-0-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl-(1-4)-5-(acetylamino)-3.5-dideoxy-
- FS STEREOSEARCH
- MF C27 H45 N3 O19
- CI IDS
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 35991-83-4

CMF C16 H28 N2 O11

CM 2

CRN 21646-00-4 CMF C11 H19 N O9

Absolute stereochemistry.

- 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L10 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 109957-93-9 REGISTRY
- ED Entered STN: 22 Aug 1987
- CN β-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-
- β-D-mannopyranosyl]-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C16 H28 N2 O11
- SR CA
- LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
 (*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 109957-89-3 REGISTRY

ED Entered STN: 22 Aug 1987

CN a-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxyβ-D-mannopyranosyl]-2-deoxy- (CA INDEX NAME)

FS STEREOSEARCH

ME C16 H28 N2 O11

SR CA

LC

STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT

(*File contains numerically searchable property data)

Absolute stereochemistry.

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L10 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 102338-40-9 REGISTRY
- ED Entered STN: 26 May 1986
- CN Neuraminic acid, 0-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl- $(1\rightarrow 4)-0-2-(acetylamino)-2-deoxy-\beta-D-glucopyranosyl-$
 - (1→?)-N-acetv1- (9CI) (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- CN D-glycero-D-galacto-2-Nonulosonic acid, O-2-(acetylamino)-2-deoxy-β-Dglucopyranosyl-(1 \rightarrow 4)-0-2-(acetylamino)-2-deoxy- β -Dglucopyranosyl-(1→?)-5-(acetylamino)-3,5-dideoxy-
- FS STEREOSEARCH
- MF C27 H45 N3 O19
- IDS
- SR CA LC
 - STN Files: CA, CAPLUS

CM 1

CRN 35991-83-4

CMF C16 H28 N2 O11

Absolute stereochemistry.

CM 2

CRN 131-48-6 CMF C11 H19 N O9

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 20 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 64295-28-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN α-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]-2-deoxy-, monohydrate (9CI) (CA INDEX NAME)

OTHER NAMES: CN α -N,N'-Diacetylchitobiose monohydrate

FS STEREOSEARCH

MF C16 H28 N2 O11 . H2 O

LC STN Files: BIOSIS, CA, CAPLUS, CASREACT

CRN (34147-27-8)

● H2O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 21 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 35991-83-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN β-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxyβ-D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)

OTHER CA INDEX NAMES: CN Glucopyranose, 2-acetamido-4-

CN Glucopyranose, 2-acetamido-4-0-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-2-deoxy-, β-D- (7CI)

FS STEREOSEARCH

DR 81703-00-6, 439697-31-1

MF C16 H28 N2 O11

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

54 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

54 REFERENCES IN FILE CAPLUS (1907 TO DATE) 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967) L10 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 34147-27-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN α -D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxy- β -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-2-deoxy-, α-D- (8CI)

FS STEREOSEARCH

F5 SIEREOSEARCH

MF C16 H28 N2 O11

CI COM LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 18422-28-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy-α-D-glucopyranosyl)-2-deoxy-, D- (8CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C16 H28 N2 O11

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 14200-67-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN a-D-Glucopyranose, 2-(acetylamino)-4-0-[2-(acetylamino)-2-deoxyα-D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)

OTHER CA INDEX NAMES: CN Glucopyranose, 2-acetamido-4-0-(2-acetamido-2-deoxy-\alpha-Dglucopyranosyl)-2-deoxy-, α-D- (8CI)

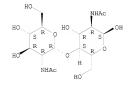
FS STEREOSEARCH

ME C16 H28 N2 O11

LC

STN Files: BEILSTEIN*, CA, CAPLUS (*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

ENTRY 119.03

SINCE FILE

TOTAL. SESSION 144.96

FULL ESTIMATED COST

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FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)
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=> s 110
L11
            89 T-10
=> s 110/thu
            89 L10
        984144 THU/RL
             2 L10/THU
                 (L10 (L) THU/RL)
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=> d 112 1-2 ti abs bib

- L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
- Destruction of bacterial spores through glycoconjugate-enhanced phagocytosis
- AB The invention discloses methods for enhancing destruction and killing of bacterial spores via phagocytosis, where phagocytosis of bacterial spores is enhanced by using a glycoconjugate. In one embodiment, the method includes modifying a surface of a bacterial spore to increase adherence to a phagocyte, and ingesting the adherence-increased spore with the phagocyte, thereby destructing and killing the spore by blocking spore-induced phagocyte cell death, while increasing phagocyte activation level and production of antimicrobial and cytocidal agents such as NO and inflammatory cytokines. The adherence of a spore to a phagocyte is increased after the surface thereof is coated with a glycoconjugate to form a glycoconjugate-coated spores. The glycoconjugate-coated spores also increase ingestion of the spores by phagocytes and facilitate phagosome-lysosome fusion, which in turn results in destruction and killing of bacterial spores via phagocytosis. The method enhances adherence, ingestion, destruction and killing of bacterial spores via
- phagocytes, which otherwise may be resistant to phagocytosis.
- AN 2007:999460 CAPLUS <<LOGINID::20080229>> DN 147:336297
- TΙ Destruction of bacterial spores through glycoconjugate-enhanced phagocytosis
- TN Tarasenko, Olga
- PA USA
- SO PCT Int. Appl., 88pp. CODEN: PIXXD2
- Patent
- LA English
- FAN. CNT 1

	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D)	ATE	
						_									-		
PI	WO 2007	1006	28		A2		2007	0907		WO 2	007-	US46	64		2	0070	222
	WO 2007	1006	28		A9		2007	1108									
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,

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MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, JT, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, BE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MI, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, AZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
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- L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
- TI β -1-4-N-Acetylglucosamine polymers for modulation of vascular structure and/or function
- B The present invention relates to compns. comprising semi-crystalline β -1-4-N-activally cosamine polymers (p-Glorac) and methods utilizing such polymers modulation of vascular structure and/or function. The compns. and methods disclosed are useful for stimulating, in a p-GloNac concentration-dependent manner, endothelin-1 release, vasconstriction, and/or reduction in blood flow out of a breached vessel, as well as for contributing to or effecting cessation of bleeding. The methods of the present invention comprise topical administration of materials comprising semi-crystalline p-GloNac polymers that are free of proteins, and substantially free of single amino acids as well as other organic and inorg. contaminants, and whose constituent monosaccharide sugars are attached in a β -1-4 conformation.
- AN 2002:123595 CAPLUS <<LOGINID::20080229>>
- DN 136:172733
- TI β -1-4-N-Acetylglucosamine polymers for modulation of vascular structure and/or function
- IN Vournakis, John N.; Finkielsztein, Sergio
- PA Marine Polymer Technologies, Inc., USA
- SO U.S. Pat. Appl. Publ., 71 pp.
- CODEN: USXXCO DT Patent
- LA English

FAN.	CNT	1																	
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		7041						2006											
	CA	2437	812			A1		2002	0822		CA	200	2-	2437	812		2	0020	208
	WO	2002	0639	61		A1		2002	0822		WO	200	2-1	US37	92		2	0020	208
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	, в	G,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, E	E,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, K	G,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, M	W,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK	, s	L,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, T	z,	UG,	ZM,	ZW,	AT,	BE,	CH,
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE	, I	Τ,	LU,	MC,	NL,	PT,	SE,	TR,
			BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GΩ	, G	W,	ML,	MR,	NE,	SN,	TD,	TG
	AU	2002	3064	55		A1		2002	0828		AU	200	2-	3064	55		2	0020	208
	AU	2002	3064	55		B2		2007	1213										
	EP	1365	651			A1		2003	1203		EP	200	2-	7401	04		2	0020	208
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
								RO,											
	JP	2004	5267	05		T		2004	0902		JΡ	200	2	5637	72		2	0020	208
		5278						2005										0020	208
	US	2003	0782	34		A1		2003	0424		US	200	2-	1947	40		2	0020	712
	US	7115	588			B2		2006	1003										
	MX	2003	PA07	176		A		2005	0214		MX	200	3-1	PA71	76		2	0030	812

	US	2007072826	A1	20070329	US	2006-54298	3	200610	003
	AU	2007251899	A1	20080124	AU	2007-25189	9	200712	220
PRAI	US	2001-781182	A	20010212					
	AU	2002-306455	A3	20020208					
	WO	2002-US3792	W	20020208					
	US	2002-194740	A1	20020712					
BE C	NT	63 THERE	ADD 63 CITED	DEFEDENCES	75.577	ATTABLE EOD	THIC	DECODE	

RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Uploading C:\Program Files\Stnexp\Queries\10762518chitotriose.str



chain nodes :

41:CLASS

50:CLASS

52:CLASS

60:CLASS 61:CLASS 62:CLASS 63:CLASS 64:CLASS

51:CLASS

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61
  62 63
64
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 42 43 44 45 46 47
chain bonds :
1-14 1-36 2-21 2-37 3-22 3-38 4-25 4-39 6-13 6-35 7-15 7-30 8-20 8-29
9-13 9-27 10-26 10-28 12-31 14-16 14-18 15-17 15-19 20-33 21-34 22-46
23-25 23-40
51-60 52-53 52-62 52-63 53-64
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 42-43 42-47
43-44
44-45 45-46 46-47
exact/norm bonds :
1-2 1-6 1-14 2-3 2-21 3-4 3-22 4-5 5-6 6-13 7-8 7-12 7-15 8-9 8-20
9-10 9-13 10-11 11-12 12-31 14-18 15-19 22-46 42-43 42-47 42-50 43-44
43-51 44-45 45-46
46-47 47-48 48-49 52-53
exact bonds :
1-36 2-37 3-38 4-25 4-39 6-35 7-30 8-29 9-27 10-26 10-28 14-16 15-17
20-33 21-34 23-25 23-40 24-26 24-41 31-32 42-57 43-59 44-52 44-61 46-55
47-54 48-56
50-58 51-60 52-62 52-63 53-64
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS
       20:CLASS 21:CLASS
       23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS
22:CLASS
30:CLASS
       32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS
31:CLASS
39:CLASS
       40:CLASS
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42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 49:CLASS

53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS

L13 STRUCTURE UPLOADED

=> s 113

SAMPLE SEARCH INITIATED 09:16:46 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 437 TO ITERATE

100.0% PROCESSED 437 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 7486 TO 9994
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

=> s 113 fam full

FULL SEARCH INITIATED 09:16:51 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1048 TO ITERATE

100.0% PROCESSED 1048 ITERATIONS

SEARCH TIME: 00.00.01

6 ANSWERS

L15 6 SEA FAM FUL L13

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=> d 115 1-6

L15 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN 952753-72-9 REGISTRY

ED Entered STN: 09 Nov 2007

CN β -D-Glucopyranose, 0-2-(acety1-2,2,2-d3-amino)-2-deoxy- β -D-glucopyranosy1-(1+4)-0-2-(acety1-2,2,2-d3-amino)-2-deoxy- β -D-

glucopyranosyl- $(1\rightarrow 4)$ -2-(acetyl-2,2,2-d3-amino)-2-deoxy-(CA INDEX)

NAME) FS STEREOSEARCH

FS STEREOSEARCH MF C24 H32 D9 N3 O16

SR CA

LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L15 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 147695-57-6 REGISTRY
- ED Entered STN: 21 May 1993
- CN α-D-Glucopyranose, δ-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1+4)-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1+4)-2-(acetylamino)-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C24 H41 N3 O16
- SR CA
- LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L15 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 59990-26-0 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN α-D-Glucopyranose, O-2-(acetylamino)-2-deoxy-α-D-glucopyranosyl-(1+4)-O-2-(acetylamino)-2-deoxy-α-D-glucopyranosyl-(1+4)-2-(acetylamino)-2-deoxy- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C24 H41 N3 O16
- LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L15 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 50686-75-4 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN D-Glucopyranose, 0-2-(acetyl-2-14C-amino)-2-deoxy- β -D-glucopyranosyl-(1 \rightarrow 4)-0-2-(acetyl-2-14C-amino)-2-deoxy- β -D-glucopyranosyl-

(1→4)-2-(acety1-2-14C-amino)-2-deoxy- (9CI) (CA INDEX NAME)

OTHER NAMES: CN N.N',N'

- N.N',N''-Triacetyl[14C]chitotriose
- FS STEREOSEARCH
- MF C24 H41 N3 O16
- LC STN Files: CA, CAPLUS

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L15 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 50686-74-3 REGISTRY
- ED Entered STN: 16 Nov 1984
- $\begin{array}{lll} & D-Glucopyranose-1-C-t, & O-2-(acetylamino)-2-deoxy-\beta-D-glucopyranosyl-1-C-t-(1+4)-O-2-(acetylamino)-2-deoxy-\beta-D-glucopyranosyl-1-C-t- \end{array}$
 - (1→4)-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Chitotriose-1,1',1''-3H3

FS STEREOSEARCH

MF C24 H38 N3 O16 T3

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN 13319-32-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN B-D-Glucopyranose, C-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl- (144)-2-(acetylamino)-2-deoxy-B-D-glucopyranosyl- (144)-2-(acetylamino)-2-deoxy-GCA INDEX NAME)

OTHER CA INDEX NAMES:

- CN Glucopyranose, O-2-acetamido-2-deoxy- β -D-glucopyranosyl-(1+4)-O-2-acetamido-2-deoxy- β -D-glucopyranosyl-(1+4)-2-acetamido-2-deoxy- β -D-(8CI)
- CN Glucopyranose, 0-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1+4)-0-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1+4)-2-acetamido-2deoxy- (7C1)

FS STEREOSEARCH

MF C24 H41 N3 O16

- LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
 - (*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16 REFERENCES IN FILE CA (1907 TO DATE)
16 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 82.11 235.49 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL. ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.60

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http://www.cas.org/infopolicy.html

=> s 115/thu 19 L15 984144 THU/RL L16 0 L15/THU (L15 (L) THU/RL) => s 115 L17 19 L15 => d 117 1-19 ti abs bib

L17 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

 $\ensuremath{\mathsf{TI}}$ - Preparation of nucleotide derivatives as glycosyltransferase inhibitors $\ensuremath{\mathsf{GI}}$

An object of the invention is to provide various inhibitors of various glycosyltransferases. The object was achieved in the invention by focusing on the conformation change of the enzyme induced by the substrate and applying the correlation between the change and the catalytic activity to a design of a regulatory factor (such as an inhibitor) of an enzymic activity, more specifically, by providing a novel compound obtained by introducing a bulky group into a modified nucleotide or sugar via a triazole group, an oxime group, a hydrazone group or the like. The above novel compds. are represented by A-B-C (A = N3, COR, CHO; R = alkyl; B = sugar component; C = nucleotidyl, i.e. nucleoside mono-, di-, or triphosphate), e.g. (I; R1 = N3), which further undergo 1,3-dipolar cycloaddn. reaction (Click reaction) with acetylene compds. or condensation reactions with hydroxylamines or hydrazines to give X-Y-B-C (B, C = same as above; X = bulky group; Y = -ON:, NHN:,1 or 1,2,3-triazole-1,4-diyl), e.g. I (R1 = Q). These A-B-C and X-Y-B-C compds. are inhibitors of glycosyltransferases such as fucosyl transferase, sialyl transferase, or galactosyl transferase and useful for treating or preventing disorders or diseases caused by abnormal activity of glycosyltransferases, e.g. cancer and cancer metastasis. Thus, 6-azido-2,3,4-tri-O-acetyl-6-deoxy-β-L-galactopyranose-1-phosphate was condensed with guanosine-5'-monophosphate morpholidate in the presence of 1H-tetrazole in pyridine for 2 days to give, after workup, purification by DEAE ion-exchange column chromatog., and passing through a column of Dowex 50X8 ion exchange resin, 11% quanosine-5'-diphosphate 6-azido-6-deoxyβ-L-galactopyranosyl ester (II; R = N3). II (R = N3) underwent Click reaction with MeOP(O)(ONa)OP(O)(ONa)OCH2CH2OCH2CH2OCH2CONHCH2C.tplbond.CH in the presence of CuSO4 in aqueous sodium ascorbate at room temperature for

give a triazole derivative II (R = Q). II (R = Q) inhibited fucosyl transferase with Ki of 19.6 μM .

AN 2007:788618 CAPLUS <<LOGINID::20080229>>

DN 147:189360

TI Preparation of nucleotide derivatives as glycosyltransferase inhibitors

IN Nishimura, Shin-Ichiro; Kondo, Hirosato

PA Hokkaido University, Japan; Shionogi & Co., Ltd.

SO PCT Int. Appl., 272pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.					KIN	D	DATE		i	APPL	ICAT	ION I	NO.		D	ATE		
PI	PI WO 2007081031				A1 20070719			1	viO 2	007-	JP50	534		2	0070	116		
		W:						AU,										
			CN.	co.	CR.	CU.	CZ.	DE,	DK.	DM.	DZ.	EC.	EE.	EG.	ES.	FI.	GB.	GD.
								HR.										
			KP.	KR.	KZ.	LA.	LC.	LK.	LR.	LS.	LT.	LU.	LV.	LY.	MA.	MD.	MG.	MK,
			MN.	MW.	MX.	MY.	MZ.	NA,	NG.	NI.	NO.	NZ.	OM.	PG.	PH.	PL.	PT.	RO.
								SG,										
			TZ.	UA.	UG.	US.	UZ.	VC.	VN.	ZA.	ZM.	ZW						
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT.	LT.	LU,	LV,	MC,	NL,	PL,	PT.	RO,	SE,	SI,	SK,	TR.	BF,	BJ,
			CF.	CG.	CI.	CM.	GA,	GN,	GO,	GW.	ML.	MR.	NE.	SN.	TD.	TG.	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG.	KZ,	MD,	RU,	TJ,	TM										
PRAI	JP	2006	-803	9		A		2006	0116									
	JΡ	2006	-225	194		A		2006	0822									
OS	MAI	RPAT	147:	1893	60													
RE.CNT 9 THERE ARE 9							TED	REFE	RENC	ES A	VAIL	ABLE	FOR	THI	S RE	CORD		
ALL CITATIONS AVAILABLE IN THE RE F										FORM	AT							

- L17 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Chemoenzymic synthesis of stable isotope labeled UDP-N-[2H]-acetylclucosamine and [2H]-acetyl-chitooligosaccharides
- AB Labeled UDP-GlcNAc and chitooligosaccharides should be powerful tools for studies of N-acetylglucosaminyltransferase such as chitin synthases. describe here a rapid, inexpensive and a common strategy for the chemoenzymic synthesis of uridine 5'-diphospho-N-[2H]-acetyl-glucosamine and the chemical preparation of N-[2H]-acetyl chitooligosaccharides (from 2 to
 - mers). Deuterated UDP-GlcNAc analog was tested as chitin synthase substrate and it exhibited an incorporation level in chitin as the natural substrate. Deuterium labeling of carbohydrates present different advantages: it is a stable isotope and allows glycosyltransferase mechanism studies by a mass spectrometry approach.
- AN 2006:1293226 CAPLUS <<LOGINID::20080229>>
- DN 147:486620
- ΤI Chemoenzymic synthesis of stable isotope labeled UDP-N-[2H]-acetylglucosamine and [2H]-acetyl-chitooligosaccharides
- AII Becker, Hubert F.; Thellend, Annie; Piffeteau, Annie; Vidal-Cros, Anne
- CS Synthese, Structure et Fonction de Molecules Bioactives UMR7613, Universite Pierre et Marie Curie, Paris, 75252, Fr.
- SO Glycoconjugate Journal (2006), 23(9), 687-692
- CODEN: GLJOEW: ISSN: 0282-0080
- PB Springer DT Journal
- T.A English
- RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Proteins isolated from lucerne roots by affinity chromatography with sugars analogous to Nod factor moieties
- Nod factors are important elicitors in legume-bacterium symbiosis. Any candidate plant receptor(s) for these lipo-oligosaccharides can be expected to show some lectin-like properties. A novel protein (P60), a native tetramer with 60 kDa monomers, has been isolated from a membrane fraction of Medicago sativa (lucerne, alfalfa) roots by using affinity chromatog. with either GlcNAc or N,N',N"-triacety1-(1 → 4)-β-D-chitotriose [(GlcNAc)3] grafted to agarose beads as the matrix
 - and, in a second step, Sephadex G-200 gel filtration. With

(GlcNAc)3-agarose an addnl. protein of 78 kDa was isolated. P60 showed hemagglutination activity with specificity for GalNAc, GalN, GlcNAc and GlcN. Binding expts. with radioactive GlcNAc gave a Kd of 95 nM and one binding site per monomer of P60; Nod factor competed strongly for this binding. In native PAGE, protein incubated with O-sulfated Nod factors had a higher electrophoretic mobility as a consequence of binding. However, the largest modification was observed with a natural mixture of Nod factors, containing the O-acetylated and O-sulfated tetrasaccharidic NodRm-IV(Ac,S) (in which Ac stands for an O-acetylated group at the non-reducing end and S for O-sulphation at the reducing end) in addition to the non-O-acetylated NodRm-IV(S) (which alone had little effect) and NodRm-V(S). The native PAGE study was also performed with known lectins from other sources, but only the 34 kDa lectin of Phytolacca americana (pokeweed) showed any such interaction, although without discrimination between Nod factors. Finally, one peptide of each isolated protein was sequenced; the peptide from P60 showed some similarity with dihydrolipoamide dehydrogenase and ferric legHb reductase, whereas the peptide from P78 was identical with an analogous region of 70 kDa heat shock protein.

- AN 2000:97408 CAPLUS <<LOGINID::20080229>>
- DN 132:234330
- TI Proteins isolated from lucerne roots by affinity chromatography with sugars analogous to Nod factor moieties
- AU Minic, Zoran; Leproust-Lecoester, Lydie; Laporte, Jean; De Kouchkovsky, Yaroslav; Brown, Spencer C.
- CS Institut des Sciences Vegetales (CNRS-UPR40), Gif-sur-Yvette, F-91198, Fr. SO Biochemical Journal (2000), 345(2), 255-262
 - CODEN: BIJOAK; ISSN: 0264-6021
- PB Portland Press Ltd.
- DT Journal
- LA English
- RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Lectin-mediated bioadhesion: proteolytic stability and binding characteristics of wheat germ agglutinin and Solanum tuberosum lectin on Caco-2, HT-29, and human colonocytes
- For the development of lectin-mediated drug delivery systems, the proteolytic stability of the nontoxic lectins from Arachis hypogea, Lens culinaris, Dolichus biflorus, Solanum tuberosum (STL), and Triticum vulgare was investigated by in vitro exposure to gastrointestinal enzymes. No degradation products were observed within 24 h of incubation on SDS-polyacrylamide gels. Binding to human colon carcinoma cell lines was investigated by flow cytometry. The fluorescein-labeled derivs. of N-acetylglucosamine-specific wheat germ agglutinin (WGA) and STL exhibited the highest cell-associated fluorescence intensity. As determined by dilution expts., the number of WGA-binding sites on Caco-2, HT-29, and human colonocytes exceeded those for STL by 5-, 1.7-, and 1.4-fold, resp. By a competitive flow cytometric assay using N,N',N''-triacetylchitotriose for inhibition, WGA affinity exceeded STL affinity by 10-fold. The affinity of each lectin to Caco-2, HT-29, and human colonocytes was about the same, indicating that similar lectin receptors were involved. Preventing N-glycosylation of the carcinoma cells by pretreatment with 0.001% tunicamycin for 40 h resulted in 30% inhibition of WGA and STL binding. When WGA was covalently attached to Sepharose beads (250-350 µm), the interaction with HT-29 and Caco-2 cells showed stable and tight binding. Therefore, especially considering the comparable affinity of human colonocytes and monolayer-forming Caco-2 and HT-29 cells, this system is proposed as a model for the development of lectin-mediated particulate pharmaceutical devices.

- AN 1997:435068 CAPLUS <<LOGINID::20080229>>
- DN 127:253093
- TI Lectin-mediated bioadhesion: proteolytic stability and binding characteristics of wheat germ agglutinin and Solanum tuberosum lectin on Caco-2, HT-29, and human colonocytes
- AU Gabor, Franz; Wirth, Michael; Jurkovich, Barbara; Haberl, Ines; Theyer, Gerhard; Walcher, Gerhard; Hamilton, Gerhard
- CS Institute of Pharmaceutical Technology, The University of Vienna, Althanstrasse 14, Vienna, A-1090, Austria
- SO Journal of Controlled Release (1997), 49(1), 27-37
- CODEN: JCREEC; ISSN: 0168-3659
- PB Elsevier
- DT Journal
- LA English
- RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI A proton NMR study of a fragment of partially N-deacetylated chitin produced by lysozyme degradation
- AB The terminal unit of the N-deacetylated oligomer, which was prepared by lysozyme hydrolysis of chitin, was determined by 1H NMR study.
- AN 1993:255230 CAPLUS <<LOGINID::20080229>>
- DN 118:255230
- TI A proton NMR study of a fragment of partially N-deacetylated chitin produced by lysozyme degradation
- AU Ishiguro, Kenichi; Yoshi, Naoko; Sakurai, Minoru; Inoue, Yoshio
- CS Dep. Biomol. Eng., Tokyo Inst. Technol., Tokyo, 152, Japan
- SO Carbohydrate Research (1992), 237, 333-8 CODEN: CRBRAT: ISSN: 0008-6215
- DT Journal
- LA English
- L17 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of N-acetylglucosamine oligosaccharide from chitin
- AB A simple method for small scale preparation of N-acetylglucosamine oligosaccharides from chitin was described. A HCL hydrolyzate of chitin was separated first on a column packed with granular active carbon to remove most of the monosaccharides and then the remaining component was subjected to separation by HPLC with LiChrosorb-NHZ as stationary phase and MeON-HZO as eluant. Mono-, di-, and tri-N-acetylglucosamine saccharides were obtained and characterized.
- AN 1987:192242 CAPLUS <<LOGINID::20080229>>
- DN 106:192242
- TI Preparation of N-acetylglucosamine oligosaccharide from chitin
- AU Shang, Heng; Tang, Jiajun; Huang, Kewu
- CS Inst. Environ. Chem., Acad. Sin., Beijing, Peop. Rep. China
- SO Shengwu Huaxue Yu Shengwu Wuli Xuebao (1986), 18(5), 453-4 CODEN: SHWPAU: ISSN: 0582-9879
- DT Journal
- LA Chinese
- L17 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Subunit structure and interactions of the phloem proteins of Cucurbita maxima (pumpkin)
- AB The 2 major proteins from the phloem exudate of C. maxima (pumpkin), PP1 and PP2, were stable in the absence of reducing agents after modification of their accessible cysteine residues with iodoacetamide. This permitted their purification without precautions to prevent oxidation PP2, a lectin specific for oligomers of N-acetyl-L-glucosamine, was shown by sedimentation-equilibrium ultracentrifugation to be a dimer of mol. weight of

48,000. Neither dithiothreitol nor tri-(N-acetyl-D-glucosamine) altered this value. The constituent polypeptides were linked by 2 buried disulfide bridges. PP2 behaved aberrantly on gel-filtration on both Sephadex and Bio-Gel unless tri-(N-acetyl-D-glucosamine) was added to the elution buffer; the mol. weight was then measured as 46,000. Other proteins which bind oligomers of N-acetyl-D-glucosamine are also retarded on gel-filtration. Soluble phloem filaments were prepared by collection of exudate into deaerated buffer containing iodoacetamide but no reducing agent. Oxidative gellation of the filaments was prevented by rapid modification of their many accessible cysteine residues, and is assumed to have maintained the d.p. found in vivo. Those disulfide bridges which were present allowed the incorporation of .apprx.60% of the PP1 and 80% of the PP2 into polymeric material. Thus, PP1 and PP2 are both structural proteins present in the filaments observable in vivo. PP2 had an elongated binding-site for oligomers of N-acetyl-D-glucosamine. It is suggested that this lectin immobilizes bacteria and fungi to the cross-linked filaments which seal wounded phloem sieve-tubes, and thus maintains sterility.

AN 1983:520547 CAPLUS <<LOGINID::20080229>>

DN 99:120547

OREF 99:18551a,18554a

TI Subunit structure and interactions of the phloem proteins of Cucurbita maxima (pumpkin)

AU Read, Steve M.; Northcote, Don H. CODEN: EJBCAI; ISSN: 0014-2956

CS Dep. Biochem., Univ. Cambridge, Cambridge, CB2 1QW, UK SO European Journal of Biochemistry (1983), 134(3), 561-9

Journal

LA English

- L17 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- Separation and mutarotation of anomers of chitooligosaccharides TI

In a study on the lysozyme-catalyzed reaction of chitooligosaccharides, it AB was found that each chitooligosaccharide gave 2 completely separated peaks on high-performance liquid chromatog. with a partition column. Synthetic 2-acetamido-2-deoxy- β -D-glucopyranose gave [α]D14 =

-18.1° (c = 0.51, H2O) and a large 2nd peak with a minor 1st peak on high-performance liquid chromatog. When an aqueous solution of the β-anomer was allowed to stand, the area of the 1st peak on high-performance liquid chromatog, increased, together with a decrease in the area of the 2nd peak and an increase in [all value. The 2 peaks of each chitooligosaccharide on high-performance liquid chromatog. were thus due to the separation of $\alpha-$ and $\beta-$ anomers. The mutarotation of 2-acetamido-2-deoxy- β -D-glucopyranose was followed by monitoring the [a]D value and the peak area of the 2 peaks on high-performance liquid chromatog. The ratios of α - and β -anomers of

chitooligosaccharides produced by the lysozyme-catalyzed reaction of chitopentaose were different from those of the corresponding authentic chitooligosaccharides which were allowed to stand in the absence of the enzyme under the conditions used for the enzymic reaction.

ΑN 1982:176790 CAPLUS <<LOGINID::20080229>>

DN 96:176790

OREF 96:29075a,29078a

- TI Separation and mutarotation of anomers of chitooligosaccharides
- ΑU Fukamizo, Tamo; Hayashi, Katsuya
- CS Fac. Agric., Kyushu Univ., Fukuoka, 812, Japan
- SO Journal of Biochemistry (Tokyo, Japan) (1982), 91(2), 619-26 CODEN: JOBIAO; ISSN: 0021-924X
- Journal
- L.A. English

- L17 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- The effect of N-acylqlucosamines on the biosynthesis and secretion of insulin in the rat
- AR N-acvlglucosamines stimulated insulin release from rat islets in vitro in the presence of substimulatory concns. of glucose, and the effect was abolished by mannoheptulose. Increasing the acyl-chain length from N-acetyl- to N-hexanoyl-D-qlucosamine impaired the secretory response, but N-(dichloroacetyl)-D-glucosamine was a more potent stimulator of release than N-acetyl-D-glucosamine. N-acylglucosamines elicited insulin release in vivo; plasma insulin levels were increased maximum by N-(dichloroacetyl)glucosamine. N-acetylglucosamine stimulated proinsulin biosynthesis in the absence of glucose and the effect was not abolished by mannoheptulose.
- AN 1976:403063 CAPLUS <<LOGINID::20080229>>
- DN 85:3063
- OREF 85:499a,502a
- The effect of N-acylglucosamines on the biosynthesis and secretion of insulin in the rat
- ΑU Ashcroft, Stephen J. H.; Crossley, Jeanette R.; Crossley, Peter C.
- CS Med. Sch., Univ. Bristol, Bristol, UK SO
 - Biochemical Journal (1976), 154(3), 701-7 CODEN: BIJOAK; ISSN: 0264-6021
- DT Journal
- LA English
- L17 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- Mechanism for lysozyme-catalyzed hydrolysis
- AB Secondary α -3H kinetic isotope effects were utilized to probe the nature of the transition state in the lysozyme-catalyzed hydrolysis of chitotriose. A general synthesis of specifically labeled chitin oligomers (in particular chitotriose-1,1',1''-3H3, the substrate used in these studies) is described. Injection of Drosophila melanogaster larvae with labeled N-acetyl-D-glucosamine yields chitin, which can be hydrolyzed to give a range of chitin oligomers from chitobiose to chitoheptose. The value of kH/kT (the 3H isotope effect) obtained for the lysozyme-catalyzed hydrolysis of chiotriose was 1.19. This result indicates very considerable carbonium ion character in the transition state, and thus the mechanistic alternatives for lysozyme hydrolysis become distinguishable.
- ΑN 1973:543848 CAPLUS <<LOGINID::20080229>>
- DN 79:143848
- OREF 79:23321a,23324a
- ΤI Mechanism for lysozyme-catalyzed hydrolysis
- AU Smith, L. E. H.; Mohr, L. H.; Raftery, M. A. CS
- Church Lab. Chem. Biol., California Inst. Technol., Pasadena, CA, USA SO
- Journal of the American Chemical Society (1973), 95(22), 7497-500
- CODEN: JACSAT; ISSN: 0002-7863 DT
- Journal LA English
- L17 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
 - Circular dichroism of human lysozyme
- AB Effects of pH and the various inhibitors on the CD spectrum of human urine lysozyme were studied and compared with those for hen egg-white lysozyme (EC 3.2.1.17). Human lysozyme gave tryptophyl CD maxima at 305 and 293.5 mμ with a neg. and pos. ellipticity, resp., at neutral pH values. On lowering the pH, the both CD maxima changed in a manner similar to that for the corresponding maxima at 305 and 295 mm of hen egg-white lysozyme. This change was thus ascribed to the change in the interaction of Trp-108 and Glu-35. At alkaline pH values, as the tyrosyl residues were ionized, a conformation-dependent CD band with a large neg. ellipticity newly appeared at about 315 mm. Since this wavelength was much longer

than that for the corresponding CD band (298 mm) of hen egg-white lysozyme, this CD band reflects a special interaction between an ionized tyrosyl and other residues. Effects of di- and tri-N-acetylqlucosamine on the CD band at 305 mm were very similar to those for hen egg-white lysozyme. Both the equilibrium mixture of N-acetylglucosamine (NAG) and its β-methyl glycoside, however, gave no significant effect on the ellipticity at this wavelength; this fact differed from that for hen egg-white lysozyme. All the inhibitors studied also slightly enhanced another tryptophyl CD maximum at 293.5 mm; this was a contrast to a large enhancement of the corresponding maximum at 295 mm of hen egg-white lysozyme. All these inhibitors also reduced the neg. ellipticity at about 275 mm. The extent of this reduction by di- and tri-NAG was greater than that for NAG and its β -methyl glycoside. The CD changes produced by tri-NAG at alkaline pH values were very similar to those for the binding at neutral pH values.

1972:137494 CAPLUS <<LOGINID::20080229>> AΝ

76:137494 DN

OREF 76:22295a,22298a

Circular dichroism of human lysozyme

AU Ikeda, Kiyoshi; Hamaguchi, Kozo; Miwa, Shiro; Nishina, Toshihiro

CS Fac. Sci., Osaka Univ., Tovonaka, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1972), 71(3), 371-8 CODEN: JOBIAO: ISSN: 0021-924X

DT Journal

LA English

L17 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Kinetics of lysozyme-substrate interactions

AB In the mechanism of the hydrolysis of linear polymers of N-acetylglucosamine (I) by lysozyme (II), it was observed that H+ uptake by II at low substrate concentration is associated with binding to the 1st 3 of 6 sites

on the enzyme while H+ is released upon subsequent binding to the bond-breaking site. Results of kinetic investigations on the binding of the trimer of I at pH 7.0 and of the dimer of I at pH 6.0 and 7.0 to the 1st sites of II are reported.

AN 1970:39264 CAPLUS <<LOGINID::20080229>>

DN 72:39264

OREF 72:7199a,7202a

ΤI Kinetics of lysozyme-substrate interactions

AU Holler, Eggehard; Rupley, John A.; Hess, George P.

CS Cornell Univ., Ithaca, NY, USA

SO Biochemical and Biophysical Research Communications (1969), 37(3), 423-9 CODEN: BBRCA9: ISSN: 0006-291X

DT Journal T.A

English

L17 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TΙ Synthetic activity of hen egg protein lysozyme

AB Incubation of di-N-acetylchitobiose, tri-N-acetylchitotriose and tetra-N-acetylchitotetraose in pH 3.5 phosphate buffer with lysozyme yielded a precipitate of a chitinlike product. The reaction was facilitated by lengthening of the substrate chain.

1964:405502 CAPLUS <<LOGINID::20080229>> AN

DN 61:5502

OREF 61:905b-c

TT Synthetic activity of hen egg protein lysozyme

Kravchenko, N. A.; Maksimov, V. I. AII

SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1964), (3), 584 CODEN: IASKA6; ISSN: 0002-3353

DT Journal

- LA Unavailable
- L17 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- II Enzymes from bovine placenta and seminal vesicles that oxidize $D^-(-)-1,2$ -propanediol and other polyols-their possible relation to fructose formation
- AB Soluble proteins displaying D-(-)-1,2-propanediol: nicotinamide adenine dinucleotide phosphate oxidoreductase activity were purified 50- to 60-fold from bovine placental tissue and from bovine seminal vesicle, using chromatographic methods. The enzymes, which had similar chromatographic behavior, showed stereospecificity for the D-forms of the substrates tested. They catalyzed the following reversible reactions: D-1,2-propanediol.dblharw. D-lactaldehyde; glycerol.dblharw. D-glyceraldehyde; D-sorbitol.dblharw. D-glucose. Both enzymes were active over a wide pH range and were strongly inhibited by p-mercuribenzoate and by some heavy metals. The reaction kinetics did not follow the Michaelis-Menten equation when the aldehydes were used as substrates. The main physiol. function of these enzymes was to catalyze the transformation of D-glucose to D-sorbitol, an intermediate in D-frucose formation.
- AN 1964:405501 CAPLUS <<LOGINID::20080229>>
- DN 61:5501
- OREF 61:904h,905a-b
- Enzymes from bovine placenta and seminal vesicles that oxidize D-(-)-1,2-propanediol and other polyols-their possible relation to fructose formation
- AU Velle, Weiert; Engel, Lewis L.
- CS Norges Vet.-Hoegskole, Oslo, Norway
- SO Endocrinology (1964), 74(3), 429-39 CODEN: ENDOAO: ISSN: 0013-7227
- DT Journal
- LA Unavailable
- L17 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Alkaline degradation of amino sugars
- AB Tri-N-acetylchitotriose (I) was degraded in 0.04N Ca(OH)2 at 25° with the formation of D-isosaccharinic acid. I, di-N-acetylchitobiose and 2-acetamido-2-decay-D-glucose (II) were also detected in the reaction mixture Sodium hyaluronate was also degraded under the same conditions with the production of acids. Different reaction mechanisms were proposed for alkaline decradation of 40-substituted II and 30-o-substituted II.
- AN 1962:423410 CAPLUS <<LOGINID::20080229>>
- DN 57:23410
- OREF 57:4745q-h
- TI Alkaline degradation of amino sugars
- AU BeMiller, J. N.; Whistler, Rov L.
- CS Purdue Univ., Lafayette, IN
- SO Journal of Organic Chemistry (1962), 27, 1161-4 CODEN: JOCEAH: ISSN: 0022-3263
- DT Journal
- LA Unavailable
- L17 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Chitinase activity in cockroach and termite extracts
- AB When chitin (I) has been partially altered, more rapid tests of chitinase (II) activity can sometimes be run, but for a rigorous demonstration of II an unaltered I was required (method of preparation from crab carapace given). It was demonstrated that unaltered I could be broken down by the blood, digestive juice, cuticle brei, extract of cast skins, and saliva of cockroaches. II was also demonstrated in an extract of whole termites (Coptotermes lactuss). The optimum pH for breakdown of unaltered I by

cockroach (Periplaneta americana) digestive II was 5.4-6.0. The products of I digestion were 75% of N-acetylglucosamine (III), a possible dimer and trimer of III, and a trace of glucosamine. Other forms of II from roaches produced only III and a trace of glucosamine. No acetylase activity was detected in the cockroach prepns. Tests indicated that a given preparation of II liberated different amts. of III from different I prepns. True native I consists of polymerized III in a complex with native protein but in common usage, the term "chitin" is applied to the polymerized III alone. Results are interpreted in relation to previous reports, with consideration of the different forms of II occurring in insects.

AN 1962:418923 CAPLUS <<LOGINID::20080229>>

DN 57:18923

OREF 57:3879b-d

- ΤI Chitinase activity in cockroach and termite extracts
- AU Waterhouse, D. F.; Hackman, R. H.; McKellar, J. W. CS
- Commonwealth Sci. Ind. Res. Organ., Canberra, Australia SO Journal of Insect Physiology (1961), 6, 96-112
- CODEN: JIPHAF; ISSN: 0022-1910
- Journal
- LA Unavailable
- L17 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Some carbohydrases of the oyster
- AB See CA 56, 13362q.
- 1962:418922 CAPLUS <<LOGINID::20080229>> AN
- DN 57:18922
- OREF 57:3879a-b
- TI Some carbohydrases of the oyster
- AU Courtois, Jean Emile; Petek, Fahrettin; Dong, To
- SO Bulletin de la Societe de Chimie Biologique (1962), 44, 11-21 CODEN: BSCIA3; ISSN: 0037-9042
- Journal
- Unavailable LA
- L17 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TΙ Preparation of tri-N-acetylchitotriose-H3 and its hydrolysis by lysozyme
- AB cf. CA 52, 15646a. Uniform radioactive labeling of this compound was obtained by incubating it with H3 gas according to the technique of Wilzbach (CA 51, 10359a), precipitating the product, and purifying it by paper chromatography. The product had a sp. activity of 56 µc./mg. Lysozyme

hydrolyzed the trisaccharide to di-N-acetylchitobiose and N-acetylglucosamine (I). Another unidentified cleavage product was observed which differed from glucosamine. The pH optimum of the reaction was 5. I inhibits the hydrolysis (50% at a concentration of 0.1 M), but glucosamine does not. Similarly, lysis of suspended Micrococcus

lysodeikticus cells by lysozyme is inhibited by I but not by glucosamine.

- 1962:68394 CAPLUS <<LOGINID::20080229>> AN DM
- 56:68394 OREF 56:13243g-i
- ΤI Preparation of tri-N-acetylchitotriose-H3 and its hydrolysis by lysozyme
- ΑU Wenzel, Martin; Lenk, Hans Peter; Schuette, Ernst
- CS Freie Univ., Berlin
- SO Hoppe-Sevler's Zeitschrift fuer Physiologische Chemie (1962), 327, 13-20 CODEN: HSZPAZ: ISSN: 0018-4888
- DT Journal
- LA Unavailable
- L17 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
- TT Diphosphopyridine nucleotide-linked aldehyde dehydrogenase. I. Specificity and sigma-rho function

- AB cf. CA 53, 8238i. Diphosphopyridine nucleotide-linked liver aldehyde dehydrogenase was prepared with twice the activity previously reported. The enzyme is difficult to prepare consistently at this level of purity and is relatively unstable when more highly purified. The pH optimum is shifted to higher values when lower concns. of aldehyde are used. A method is described for a more definite determination of Km values for aliphatic as well
- aromatic aldehydes. The enzyme catalyzes the oxidation of a variety of substituted benzaldehydes. The relative rates of oxidation of these aldehydes correlate with Hammett's sigma values to yield a diphasic curve with linear links. A similar type of plot was obtained previously in connection with nonenzymic reactions of substituted benzaldehydes. The results are discussed with reference to an interpretation of enzymic oxidation involving activation of the substrate through nucleophilic repulsion in a characteristic push-oull mechanism.
- AN 1962:68393 CAPLUS <<LOGINID::20080229>>
- DN 56:68393
- OREF 56:13243e-q
- TI Diphosphopyridine nucleotide-linked aldehyde dehydrogenase. I. Specificity and sigma-rho function
- AU Deitrich, Richard A.; Hellerman, Leslie; Wein, John
- CS Johns Hopkins Univ., Baltimore, MD
- SO Journal of Biological Chemistry (1962), 237, 560-4
 - CODEN: JBCHA3; ISSN: 0021-9258
- DT Journal
- LA Unavailable

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```
=> exp tri-N-acetylchitotriose/cn
E1
                     TRI-N-ACETYL-4,5-DIHYDRO-6''-DEOXYBROMOTOPSENTINE/CN
E2
                     TRI-N-ACETYL-D-GLUCOSAMINE/CN
E3
               1 --> TRI-N-ACETYLCHITOTRIOSE/CN
E4
                     TRI-N-ACETYLCRAMBESCINE A/CN
E5
                     TRI-N-ACETYLCRAMBINE A/CN
                     TRI-N-ACETYLETHYLENEDIAMINE/CN
E6
E7
                     TRI-N-AMYL PHOSPHATE/CN
                     TRI-N-AMYLAMINE/CN
E8
                   TRI-N-AMYLPHOSPHINE OXIDE/CN
TRI-N-BENGYL-1,3,5-TRIAZACYCLOHEXANE/CN
TRI-N-BUTOXY-N-PROPYLSILANE/CN
TRI-N-BUTOXYBORANE/CN
E9
               1
E10
E11
E12
=> s e3
L18
               1 TRI-N-ACETYLCHITOTRIOSE/CN
=> exp di-N-acetylchitobiose/cn
                     DI-N-ACETYLCHITOBIASE PRECURSOR 385-AMINO ACID (DICTYOSTELIU
               1
                     M DISCOIDEUM STRAIN AX4 CHROMOSOME 2 MAP 1432191-1511958)/CN
                     DI-N-ACETYLCHITOBIITOL/CN
E2
EЗ
               1 --> DI-N-ACETYLCHITOBIOSE/CN
E4
                    DI-N-ACETYLCHITOBIOSYL POLY(L-ASPARAGINE)/CN
E5
                    DI-N-ACETYLDIHYDROEUDISTOMINE G/CN
              DI-N-ACETILFORTAMINE B/CN
DI-N-ACETILFORTAMINE B/CN
DI-N-ACETILGUCOSAMINYLLACTOSE/CN
DI-N-ACETILFORTAMINOSYLLACTO-N-TETRAOSE/CN
DI-N-ACETILFRIANOSIN C O-ACETATE/CN
E6
E7
E8
E9
E10
                    DI-N-ACETYLPRIANOSIN D/CN
E11
                    DI-N-AMYL ADIPATE/CN
E12
                    DI-N-AMYL CHLOROPHOSPHATE/CN
=> s E3
L19
             1 DI-N-ACETYLCHITOBIOSE/CN
=> cile caplus
CILE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
```

=> file caplus
COST IN U.S. DOLLARS
SINCE FILE
ENTRY
ENTRY
FULL ESTIMATED COST

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L20 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

ΤI Compositions for amelioration and/or prevention of dermatopathy containing thioctic acid derivatives and/or chitin hydrolyzates

The invention relates to a composition for amelioration and/or prevention of UV-induced dermatopathy, e.g. dermatitis, keratosis, hyperplasia, and rough skin, wherein the composition is characterized by containing thioctic

acid

derivative and/or chitin hydrolyzate as an active component. Preferably, the thioctic acid derivative includes particles of thioctic acid, and/or reduced form, optically racemic form, salts, ester, amide and/or cyclodextrin inclusion compound of thioctic acid, which are coated with a lipid. The chitin hydrolyzate may include N-acetylchitooligosaccharide and/or

N-acetylglucosamine. An oral composition, e.g. a food composition, containing

the composition is also disclosed. For example, hydrogenated rapeseed oil-coated thioctic acid was mixed with other ingredients to obtain a capsule composition

AN 2007:640259 CAPLUS <<LOGINID::20080229>>

DN 147:39198

TT Compositions for amelioration and/or prevention of dermatopathy containing thioctic acid derivatives and/or chitin hydrolyzates

IN Takashita, Takashi; Ishihara, Takeo

- PA Bhn K. K., Japan
- SO Jpn. Kokai Tokkyo Koho, 18pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- LA Japanes FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007145794	A	20070614	JP 2006-47436	20060128
PRAI	JP 2005-349921	A	20051106		

- L20 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI A Multivariate Approach to Investigate Docking Parameters' Effects on Docking Performance
- AB Increasingly powerful docking programs for analyzing and estimating the strength of protein-ligand interactions have been developed in recent decades, and they are now valuable tools in drug discovery. Software used to perform dockings relies on a number of parameters that affect various steps in the docking procedure. However, identifying the best choices of the settings for these parameters is often challenging. Therefore, the settings of the parameters are quite often left at their default values, even though scientists with long experience with a specific docking tool know that modifying certain parameters can improve the results. In the study presented here, the authors have used statistical exptl. design and subsequent regression based on root-mean-square deviation values using partial least-square projections to latent structures (PLS) to scrutinize the effects of different parameters on the docking performance of two software packages: FRED and GOLD. Protein-ligand complexes with a high level of ligand diversity were selected from the PDBbind database for the study, using principal component anal. based on 1D and 2D descriptors, and space-filling design. The PLS models showed quant. relationships between the docking parameters and the ability of the programs to reproduce the ligand crystallog. conformation. The PLS models also revealed which of the parameters and what parameter settings were important for the docking performance of the two programs. Furthermore, the variation in docking results obtained with specific parameter settings for different protein-ligand complexes in the diverse set examined indicates that there is great potential for optimizing the parameter settings for selected sets of proteins.
 - 2007:637483 CAPLUS <<LOGINID::20080229>>
- AN 2007:637483 DN 147:202915
- TI A Multivariate Approach to Investigate Docking Parameters' Effects on Docking Performance
- AU Andersson, C. David; Thysell, Elin; Lindstroem, Anton; Bylesjoe, Max; Raubacher, Florian; Linusson, Anna
- CS Department of Chemistry, Ume University, Ume, SE-901 87, Swed.
- SO Journal of Chemical Information and Modeling (2007), 47(4), 1673-1687 CODEN: JCISD8; ISSN: 1549-9596
- PB American Chemical Society
- DT Journal
- LA English
- RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Glucosamine regulates differentiation of a chondrogenic cell line, ATDC5
- AB Osteoarthritis (OA) is a slowly progressing chronic joint disease.

 Glucosamine (GlcN) is a saccharide that is widely used to relieve symptoms associated with OA. However, the mechanism of the effects of GlcN on articular cartilage remains unclear. We studied the effects of GlcN and its analogs, including chitin derivs. included in health supplements

containing GlcN, on a chondrogenic cell line, ATDC5. We examined the effects

these saccharides on the proliferation and differentiation of ATDC5 cells. Glucosamine analogs, such as N-acetyl glucosamine and chitobiose, did not affect the proliferation or differentiation of ATDC5 cells. While GlcN did not affect the proliferation of ATDC5 cells, it inhibited their differentiation. Next, we examined whether GlcN affects mineralization and glycosaminoglycan (GAG) production by ATDC5 cells. Mineralization was markedly inhibited by addition of GlcN to the cell culture medium. Moreover, GlcN induced the formation of sulfated GAG in ATDC5. We also analyzed the MRNA levels in ATDC5 cells. GlcN reduced the MRNA levels of Smad2, Smad4 and MGP. GlcN might inhibit expression of MGP mRNA and induce the production of chondroitin sulfate in ATDC5 cells. The mechanism by which GlcN inhibits mineralization may be by regulating the expression of mRNA for the Smad2 and Smad4 chondropenic master genes.

AN 2007:480453 CAPLUS <<LOGINID::20080229>>

DN 147:110110

οf

Glucosamine regulates differentiation of a chondrogenic cell line, ATDC5

AU Nakatani, Sachie; Mano, Hiroshi; Im, Ryanghyok; Shimizu, Jun; Wada,

CS Department of Food Functional Science, Graduate School of Pharmacology, Josai University, 1-1 Kevakidai, Sakado, Saitama, 350-0248, Japan

SO Biological & Pharmaceutical Bulletin (2007), 30(3), 433-438

CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

- RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Promoters for secretion of $\alpha-1,4-N$ -acetylglucosamine-containing O-glycan-based sugar chain, and foods and remedies/preventives against Helicobacter pylori-related disease
- AB The invention relates to an agent for promoting secretion of $\alpha-1, 4-N-acetylglucosamine-containing O-glycan-based sugar chain from cells, characterized by containing glucosamine and/or glucosamine derivative, R-GlcN or R-GlcNAc. (GlcN = glucosamine residue; GlcNAc = N-acetylglucosamine residue; R = H, sugar chain with polymerization degree of 1-5). Pharmaceutical and foods compns. containing the agent for treatment and/or prevention of Helicobacter pylori-related disease are also disclosed. For example, the effect of N-D-acetylglucosamine on prevention of secretion of <math display="inline">\alpha-1, 4-N-acetylglucosamine-containing O-glycan-based sugar chain was in vitro tested.$

AN 2007:431982 CAPLUS <<LOGINID::20080229>>

DN 146:387188

- TI Promoters for secretion of $\alpha-1,4-N$ -acetylglucosamine-containing O-glycan-based sugar chain, and foods and remedies/preventives against Helicobacter pylori-related disease
- IN Matahira, Yoshiharu; Misawa, Yoshitomo; Oya, Fumiyo

PA Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DT Patent

LA Japanese

	AN.	CNT 1				
		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
1	PΙ	JP 2007099668	A	20070419	JP 2005-290720	20051004
1	PRAI	JP 2005-290720		20051004		

- L20 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI The antitumor activity of the hydrolysates of chitinous materials hydrolyzed by crude enzyme from Bacillus amyloliquefaciens V656
- AB Chitin, colloidal chitin and water-soluble chitosan were hydrolyzed by crude enzyme solution produce by Bacillus amyloliquefaciens V656. The hydrolyzates with 12 h hydrolysis contained optimal (GlcNAc)6 and showed higher antitumor activity. Among those chitinous materials, the most effective one was the hydrolyzates of water-soluble chitosan, which inhibited the growth of CT26 cells and reduced the survival rate to 34% in 1 day. Since the hydrolyzate of water-soluble chitosan contained the optimal hexamer/(GlcNAc)6 at 12 h, it is conjectured that the antitumor activity should be related to (GlcNAc)6. This conjecture was further affirmed by experiment with pure (GlcNAc)6. However, This phenomenon might be due to the synergistic effect of the oligomers (GlcNAc)n, n = 1-6 in the hydrolyzates. The antitumor effect of the chitinous hydrolyzates is worth further investigation. The aim of this study was to investigate the induced apoptosis in CT26 cells by the hydrolyzates of chitinous materials. It was found that the hydrolyzates (A, B and C) inhibited the survival of CT26 cells in a concentration- and time-dependent manner. The hydrolyzates induced characteristic DNA fragmentation of the CT26 cells. These results suggested that the hydrolyzates from chitinous materials are potent apoptosis-inducing agents for CT26 cells.
- AN 2007:315623 CAPLUS <<LOGINID::20080229>>
- DN 147:8478
- TI The antitumor activity of the hydrolysates of chitinous materials
- hydrolyzed by crude enzyme from Bacillus amyloliquefaciens V656 AU Liang, Tzu-Wen; Chen, Yu-Jen; Yen, Yue-Horng; Wang, San-Lang
- CS Department of Bioindustry Technology, Da-Yeh University, Chanhwa, 515, Taiwan
- SO Process Biochemistry (Amsterdam, Netherlands) (2007), 42(4), 527-534 CODEN: PBCHE5; ISSN: 1359-5113
- PB Elsevier B.V.
- DT Journal
- LA English
- RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Pharmaceutical formulations for sustained delivery of polypeptides
- AB The present invention provides pharmaceutical formulations comprising a solid ionic complex of a polypeptide having an isoelec. point lower than physiol. pH and an anionic carrier mol. The formulations of the invention are suitable as depot formulations for the sustained release of therapeutic polypeptides. Thus, to a bovine insulin solution in aqueous acetic acid (5.8 mg/mL, pH 3.9) was added a 0.5% aqueous solution of sodium
- (CMC) to obtain a complex as a white precipitate The precipitate was isolated
- by filtration, washed, centrifugated and dried. The powder obtained contained insulin 86.64%, CMC 7.50%, and water 1.50%. The solubility of the powder in a variety of media was determined For example, the solubility in
- water, saline, 0.33 M NaCl solution and 5% acetic acid was 0.016 mg/mL, 0.052 mg/mL, 0.329 mg/mL, and 7.138 mg/mL, resp.
- AN 2006:891099 CAPLUS <<LOGINID::20080229>>
- DN 145:299534
- TI Pharmaceutical formulations for sustained delivery of polypeptides
- IN Musso, Gary F.; Barker, Nicholas; Wolfe, Janet L.; Ye, Ming
- PA Praecis Phamaceuticals, Inc., USA
- SO U.S. Pat. Appl. Publ., 11pp., Cont.-in-part of U.S. Ser. No. 205,292. CODEN: USXXCO

DT Patent LA English

FAN.CNT 3

FAN.	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
PI	US 200 US 200 US 200	511208	37		A1 A1 A1		2006 2005 2006	0526		US 2	004-	8357	17		2	0051 0040 0050	429
	WO 200	702223	19		A2		2007	0222		WO 2	006-1	US31	938		2	0060	815
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	ΜZ,	NA,	NG,	NI,	NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
							SL,		SY,	ΤJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,
							ZM,										
	RW	AT,															
							MC,										
							GN,										
							NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
					RU,												
PRAI	US 200						2003										
	US 200						2004										
	US 200						2005										
	US 200	0-2655	53		A		2005	1102									

- L20 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Monocyte chemoattractant activity of galectin-3
- AB Inhibitors of galectin-3 expression or activity, for administering to a subject in an amount sufficient to reduce or decrease onset, progression, severity, frequency, duration or probability of one or more symptoms associated with asthma, among other respiratory airway and respiratory mucosal disorders. Exemplary inhibitors of galectin-3 activity include galectin-3 sequences that retain carbohydrate-binding activity, galactose and its derivs. such as thio-galactoside glycoconjugates or derivs. that bind galectin-3, saccharides, glycodendrimers and N-acetyllactosamine derivs. The examples describe the monocyte chemoattractant activity of galectin-3.
- AN 2006:657266 CAPLUS <<LOGINID::20080229>>
- DN 145:117407
- TI Monocyte chemoattractant activity of galectin-3
- IN Liu, Fu-Tong; Sano, Hideki; Hsu, Daniel K. PA USA
- SO U.S. Pat. Appl. Publ., 58 pp., Cont.-in-part of U.S. Ser. No. 805,449.
- DT Patent
- LA English
- FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006148712	A1	20060706	US 2005-288966	20051128
	US 2002044932	A1	20020418	US 2001-805449	20010313
	US 7186681	B2	20070306		
PRAI	US 2000-188795P	P	20000313		
	US 2001-805449	A2	20010313		

- L20 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI oligosaccharide derivatives for induction of yeast-form growth of dimorphic fungus
- AB The invention relates to an agent for induction of yeast-form growth and inhibit mycelial-form growth of dimorphic fungus, especially Candida albicans,

for prevention of pathol. effect of the fungus, wherein the agent is characterized by containing chitosan oligosaccharide, chitosan oligosaccharide reduced product, chitin oligosaccharide, chitin oligosaccharide reduced product, glucuronic acid, glucosaminitol, lactosylamine, galactosyllactosylamine, and/or their salts.

2006:564369 CAPLUS << LOGINID::20080229>>

AN DN 145:40237

- TΙ oligosaccharide derivatives for induction of yeast-form growth of dimorphic fungus
- Matsumoto, Tatsuji; Mikami, Takeshi; Watabe, Toshihiko; Ogasawara, Ayako; Matahei, Yoshiharu; Misawa, Yoshitomo
 - Yaizu Suisan Kagaku Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 15 pp. CODEN: JKXXAF
- DТ Patent
- T.A Japanese

FAN CNT 1

	PA'	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
		2006151893 2004-346462	A	20060615 20041130	JP 2004-346462	20041130

- L20 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Diacetyl hexoses for enhancing biological functions in plant and animals
- AB The present invention provides a composition which includes elicitor compds. selected from the group consisting of: (N,N'-diacetylhexobiose)n; (N,N'-diacetylhexobiose)n having one or more associated amino acid residues,

wherein the amino acid residues are valine or ornthine; (N,N'-diacetylhexosamine)n having an associated (dihexobiose)n;

(N,N'-diacetylhexosamine)n having an associated (dihexobiose)n and one or more associated amino acid residues, wherein the amino acid residues are

valine or ornithine; or combinations thereof. The (N,N'-

diacetylhexobiose)n and (N,N'-diacetylhexosamine)n comprise N-acetylglucosamine or other amino hexosamines, while the

(N,N'-diacetylhexobiose)n and (dihexobiose)n are any D-hexoaldose or N-acetylamino derivative of D-hexoaldoses. In this aspect of the present

invention, n=1 to 5 and the compds. are all 3 kDa or less. Also provided are a method for increasing the rate of fungal growth, a method for increasing extracellular fungal enzyme production, a method for increasing biol. control of plant and animal diseases, a method for increasing a method for increasing resistance of plants to diseases, and a method of alleviating pain and increasing resistance to, or recovery from, diseases in animals, using the composition of the present invention.

AN 2006:101554 CAPLUS <<LOGINID::20080229>>

DN 144:177496

- ΤI Diacetyl hexoses for enhancing biological functions in plant and animals
- TN Lorito, Matteo; Woo, Sheridan L.; Fogliano, Vincenzo; Mach, Robert L.

PA Italv

SO U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

- Patent
- LA English FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	US 2006021470	A1	20060202	US 2005-128720	20050513
PR	AT US 2004-570765P	P	20040513		

- L20 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- Protective effects of mannan in Caco-2/TC7 cells treated with wheat-derived peptides

- ΔB Celiac disease (CD) is characterized by a permanent intolerance to wheat gliadin and related proteins in genetically susceptible individuals. It is generally considered that CD is an immuno-mediated multifactorial disease, but a direct cytotoxic activity of gliadin-derived peptides (GL-PT) on intestinal mucosa cannot be excluded. Many efforts have been done to identify possible antagonists of this direct toxicity and several studies indicated that mannan and oligomers of N-acetylglucosamine, [N,N'-diacetylchitobiose (GLcNAc)2 and N,N',N';-triacetylchitotriose (GLcNAc)31, could be very promising candidates. In the present study we investigated the ability of mannan, (GLcNAc)2 and (GLcNAc)3 to interfere with some toxic effects exerted by GL-PT, as cell growth and viability impairment, increased intestinal permeability and cellular inflammation, on a clone of the human intestinal Caco-2 cell line, Caco-2/TC7, expressing a more homogeneous population than the parental one. Our present results demonstrate that mannan, among the three mols. investigated, is the most suitable to counteract the adverse effects induced by GL-PT on Caco-2/TC7 cells, for all the parameters considered in this study.
- AN 2005:1291121 CAPLUS <<LOGINID::20080229>>
- DN 144:121722
- ΤI Protective effects of mannan in Caco-2/TC7 cells treated with wheat-derived peptides
- Vincentini, Olimpia; De Angelis, Isabella; Iannuccelli, Roberta; Silano, Marco: Stammati, Annalaura: De Vincenzi, Massimo
- Division of Human Health and Nutrition, Alimentary and Animal Health Department, Istituto Superiore di Sanita, Rome, 00161, Italy
- Carbohydrate Polymers (2005), 62(4), 338-343 SO
- CODEN: CAPOD8; ISSN: 0144-8617
- PB Elsevier B.V.
- DT Journal English LA
- RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI High throughput glycan microarrays for diagnosis and compositions of glycans for immunization and therapy
- The invention provides arrays of glycans for detecting entities that bind to glycans. In some embodiments, the arrays can be used to detect disease, blood types, antibodies, bacterial or viral infection, cancer, and the like. The invention also provides methods and kits for such detection. In another embodiment, the invention provides methods of preventing or treating disease in a mammal by administering to the mammal a composition that includes at least glycan.
- AN 2005:1027067 CAPLUS <<LOGINID::20080229>>
- DN 143:321814
- ΤТ High throughput glycan microarrays for diagnosis and compositions of glycans for immunization and therapy
- Blixt, Ola; Head, Steve IN
- The Scripps Research Institute, USA PA
- PCT Int. Appl., 228 pp. SO CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005088310	A2	20050922	WO 2005-US7370	20050307
	WO 2005088310	A3	20051124		
	WO 2005088310	A9	20061019		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML,
             MR, NE, SN, TD, TG
                                              EP 2005-730370
     EP 1723422
                           A2
                                  20061122
                                                                       20050307
            AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2007527539
                           т
                                 20070927
                                              JP 2007-502085
                                                                       20050307
     US 2007059769
                           A1
                                 20070315
                                              US 2006-516014
                                                                       20060905
PRAI US 2004-550667P
                          P
                                 20040305
     US 2004-558598P
                          P
                                 20040331
     US 2004-629833P
                          P
                                 20041119
     WO 2005-US7370
                          W
                                 20050307
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- L20 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Binding and Uptake of Wheat Germ Agglutinin-Grafted PLGA-Nanospheres by Caco-2 Monolayers
- AB The Caco-2 association of lectin-grafted PLGA-nanospheres was investigated compared to plain and BSA-coated spheres. Nanospheres made from fluorescent-labeled PLGA were coated with wheat germ agglutinin (MGA) or BSA and incubated with Caco-2 monolayers varying the concentration of nanospheres, the time, and the temperature The tests were performed in a static

horizontal as well as an aerated vertical setup to find out the system most appropriate for estimation of bioadhesion. Due to bioadhesive effects, WGA-modified particles exhibited highest association to the cells as compared to plain and BSA-coated ones. The amount of associated spheres increased with time and concentration of the nanosphere suspension. Whereas the binding of lectin-coated spheres was independent from energy, their uptake was energy consuming as opposed to BSA and plain nanospheres, which exhibited nonspecific, energy independent binding and uptake. Although more particles were associated with the monolayer in the horizontal setup than in the vertical system, the vertical system reflects true bioadhesion due to circulation of the spheres which inhibits the influence of sedimentation. Immobilization of WGA considerably enhances the binding as well as the uptake of PLGA-nanospheres by Caco-2 monolayers. For bioadhesion studies, the vertical setup is recommended instead of the horizontal setup.

- AN 2004:861945 CAPLUS <<LOGINID::20080229>>
- DN 142:204394
- TI Binding and Uptake of Wheat Germ Agglutinin-Grafted PLGA-Nanospheres by Caco-2 Monolayers
- AU Weissenboeck, Andrea; Bogner, Elisabeth; Wirth, Michael; Gabor, Franz CS Institute of Pharmaceutical Technology and Biopharmaceutics, University of Vienna, Vienna, Austria
- SO Pharmaceutical Research (2004), 21(10), 1917-1923
- CODEN: PHREEB; ISSN: 0724-8741
- PB Springer Science+Business Media, Inc.
- DT Journal
- LA English
- RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs

- AB OBJECTIVE: Reversible myocardial depression in sepsis has been ascribed to the release of inflammatory mediators. We recently found that lysozyme c (Lzm-S), consistent with that originating from the spleen, was a mediator of myocardial depression in an Escherichia coli model of septic shock in dogs. We further showed in a right ventricular trabecular (RVT) preparation that Lzm-S's depressant activity could be blocked by N,N',N" triacetylglucosamine (TAC), a competitive inhibitor of Lzm-S. We hypothesized that Lzm-S binds to or cleaves a cardiac membrane glycoprotein, thereby interfering with myocardial contraction in sepsis. In the present study, we examined whether TAC could prevent myocardial depression in an in vivo preparation and whether other related N-acetylglucosamine (NAG) structures could also inhibit Lzm-S's effect in RVT. DESIGN: Randomized exptl. study. SETTING: University laboratory SUBJECTS: Anesthetized, mech. ventilated dogs. INTERVENTIONS: We produced sepsis by infusion of E. coli over an approx. 6-h period. MEASUREMENTS AND MAIN RESULTS: We examined the effect of TAC on stroke work, our primary index of myocardial function, when treatment was administered before sepsis (pretreatment) and after 1.5 h (early treatment study) and 3.5 h of sepsis (late treatment study; LTS). In the pretreatment study and early treatment study, myocardial depression would have not yet occurred but would have already been present in the late treatment study. In RVT, we assessed the effect of other NAG oligosaccharides and variants to the NAG structure on Lzm-S's depressant activity. In pretreatment and the early treatment study. TAC prevented the reduction in stroke work observed in nontreated septic groups but did not reverse the reduction found in the late treatment study. In RVT, of the compds. tested, only N,N'diacetylglucosamine showed an inhibitory effect. CONCLUSIONS: We found that TAC, a competitive inhibitor of Lzm-S, prevented myocardial depression in exptl. sepsis. Only specific NAG structures are inhibitory to Lzm-S's depressant activity. TAC may be useful in attenuating
- cardiovascular collapse in sepsis.
 AN 2004:10964 CAPLUS <<LOGINID::20080229>>
- DN 141:133790
- TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs
- AU Mink, Steven N.; Jacobs, Hans; Duke, Krika; Bose, Deepak; Cheng, Zhao-Qin; Light, R. Bruce
- CS Departments of Pharmacology and Therapeutics, University of Manitoba, Winnipeg, MB, R3E 023, Can.
- SO Critical Care Medicine (2004), 32(1), 184-193 CODEN: CCMDC7; ISSN: 0090-3493
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 31 THERE ARE
 - THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
 - L20 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 - TI Combination of amino sugars and cysteine or cysteine derivatives
 - AB The present invention relates to chemical complexes consisting of cysteine or derivs. of cysteine and an aminosuagra as well as pharmaceutical compns. and dietary supplements comprising such complexes. The invention further relates to the use of such compns. or complexes for the preparation of a medicament or a dietary supplement in the suppression of hypersensitivity and inflammatory reactions such as rheumatic or dermatol. disorders or to a method of treating such diseases by administering such compns. and complexes. Capsules contain an example complex formed from N-acetylcysteine and glucosamine sulfate. A complex of N-acetylcysteini with glucosamine K sulfate salt had an anti-inflammatory effect in the carrageenin-induced paw edema test in rats.
- AN 2003:22691 CAPLUS <<LOGINID::20080229>>

- 138:78479 DN
- TI Combination of amino sugars and cysteine or cysteine derivatives
- Weidner, Morten Sloth TN
- PA Astion A/S, Den.
- SO PCT Int. Appl., 54 pp.
- CODEN: PIXXD2
- DT Patent LA English

FAN.CNT 1																		
PATENT NO.			KIND DATE			APPLICATION NO.					DATE							
							-											
PI						A2 20030109 A3 20031106				WO 2002-DK446					20020628			
	WO	2003	0021	25														
	WO	2003	0021	25		B1 20040521												
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,
			GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
			GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
	AU	2002	3191	10		A1		2003	0303	AU 2002-319110					20020628			
US 2003162732			A1		2003	0828		US 2	002-	1859	82		20020628					
PRAI	DK	2001	-103	8		A		2001	0629									
	DK	2001	-105	6		A		2001	0704									
	US	2001	-303	298P		P		2001	0705									
	WO	2002	-DK4	46		W		2002	0628									

- L20 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- Chitin oligosaccharides and/or chitosan oligosaccharides for preventing or TΙ treating common cold or treating pain
- AB A new method is presented which is useful in the prevention of the common cold (also called non-allergic rhinitis, viral upper respiratory tract infection, viral URI, etc. and for this presentation will be referred to as the "common cold") in mammals, including humans, and which also lessens the duration and intensity of the symptoms of the said condition should infection occur. Within the scope of the present invention is a method of treating pain in mammals, such as humans. The active ingredient in these methods can be a water soluble mixture available in oral form and selected from the chitin oligomers di N-acetyl chitobiose, tri N-acetyl chitotriose, tetra N-acetyl chitotetraose, penta N-acetyl chitopentaose, and hexa N-acetyl chitohexaose, with the water soluble oral chitosan oligomers selected from chitobiose, chitotriose, chitotetraose, chitopentaose, chitohexaose, and chitoheptaose.
- AN 2002:143281 CAPLUS <<LOGINID::20080229>>
- DN 136:194276
- TΙ Chitin oligosaccharides and/or chitosan oligosaccharides for preventing or treating common cold or treating pain
- IN Konno, Allen I.; Gauthier, Jay H.; Matahira, Yoshiharu
- JDC (Hawaii) Inc., USA PA
- SO U.S. Pat. Appl. Publ., 16 pp.
- CODEN: USXXCO
- Pat.ent.
- LA English FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 2002022601	A1	20020221	US 2001-758210	20010112		

	US	6492350	B2	20021210
PRAI	US	2000-177572P	P	20000127
	US	2000-177573P	P	20000127

- L20 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- Chitinous Materials Inhibit Nitric Oxide Production by Activated RAW 264.7 TI Macrophages
- AB Chitinous materials have been studied in wound healing and artificial skin substitutes for many years. Nitric oxide (NO) has been shown to contribute to cytotoxicity in cell proliferation during inflammation of wound healing. In this study, we examined the effect of chitin and its derivs. on NO production by activated RAW 264.7 macrophages. Chitin and chitosan showed a significantly inhibitory effect on NO production by the activated macrophages. Hexa-N-acetylchitohexaose and penta-Nacetylchitopentaose also inhibited NO production but with less potency. However, N-acetylchitotetraose, -triose, -biose, and monomer of chitin, N-acetylglucosamine and glucosamine had little effect on NO production by the activated cells. These results suggest that the promotive effect of chitinous material on wound healing be related, at least partly, to inhibit NO production by the activated macrophages. (c) 2000 Academic Press.
- AN 2000:262336 CAPLUS <<LOGINID::20080229>>
- DN 133:125208
- Chitinous Materials Inhibit Nitric Oxide Production by Activated RAW 264.7 TI Macrophages
- Hwang, Shiaw-Min; Chen, Chiung-Yun; Chen, Shan-Shan; Chen, Jian-Chyi ΑU
- Food Industry Research and Development Institute, Hsinchu, 30099, Taiwan SO Biochemical and Biophysical Research Communications (2000), 271(1),
 - CODEN: BBRCA9: ISSN: 0006-291X
- PB Academic Press
- DT Journal
- LA English
- RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- Chitin oligosaccharides, chitosan oligosaccharides and/or their salts for treatment of liver disfunction
- AB Chitin oligosaccharides, chitosan oligosaccharides and/or their salts are claimed for treatment of liver disfunction. Thus, chitin oligosaccharides containing N-acetylglucosamine, N-acetylchitobiose, N-acetylchitotriose, N-acetylchitotetraose, N-acetylchitopentaose, N-acetylchitohexaose, and N-acetylchitoheptaose were prepared, and their liver protective actions were tested in animal models.
- AN 1998:696718 CAPLUS <<LOGINID::20080229>>
- DN 130:10654
- ΤТ Chitin oligosaccharides, chitosan oligosaccharides and/or their salts for treatment of liver disfunction
- Fujiwara, Michio; Inada, Seisuke; Matahira, Yoshiharu IN
- PA Yaizu Suisan Kagaku Kogyo K. K., Japan Jpn. Kokai Tokkyo Koho, 8 pp.
- SO
- CODEN: JKXXAF DT Patent
- LA Japanese

FAN.	CNI Z						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 10287572	A	19981027	JP 1997-113346	19970415		
	US 5981510	A	19991109	US 1998-60381	19980415		
	US 6242431	B1	20010605	US 1999-353050	19990713		
PRAI	JP 1997-113346	A	19970415				

JP 1997-199370 A 19970709 US 1998-60381 A3 19980415

- L20 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Modulated expression of glycoprotein oligosaccharides identifies
- phenotypic differentiation in squamous carcinomas of the human cervix AB This study has examined changes in expression of complex oligosaccharides
- during the development of invasive squamous carcinoma of the human cervix to determine whether particular oligosaccharide structures that might influence the phenotypic behavior of individual human cervical cancers were expressed during neoplasia. An extensive panel of lectins capable of identifying all the core and antennary oligosaccharide structures commonly encountered in human epithelia was chosen to probe a range of 11 benign and 26 malignant cervical tissues, all of the latter being clin. stage I. Lectin histochem. was performed both before and after tissue desialylation using the enzyme neuraminidase to identify masking of oligosaccharide determinants by sialic acid. Non-neoplastic cervical epithelial cells expressed only type I antennary structures (Galβ1→3GalNAc) usually modified by sialic acid linked 2-6 to terminal Gal- or GalNAc residues. Type II oligosaccharide structures (Galβ1→4GlcNAc-) were not identified in these normal tissues. No other terminal antennary modifications were detected on non-neoplastic cervical squamous epithelia. Conversely, neosynthesis of type II oligosaccharides was detected by Erythrina cristagalli (ECG) binding in 50% of the squamous carcinomas. Five terminal antennary modifications were commonly identified in the carcinomas that were not identified in normal cervical epithelia and comprised the oligosaccharides bound by lectins RCA, SBA, BS-1, LTA, and UEA-1. Synthesis of these oligosaccharides resulted in expression of structures similar to those recognized as ligands for extracellular matrix-binding proteins. Apparently, expression of such novel oligosaccharide structures may be an important promoter of local invasion and further dissemination of human cervical carcinomas through enhanced binding of malignant cells to stromal matrix proteins. This study has demonstrated that identification of expressed oligosaccharide structures is an objective method of identifying individual tumor cell phenotypes and may form the basis of a useful
- functional classification of human cervical squamous carcinomas. AN 1995:832765 CAPLUS <<LOGINID::20080229>>
- DN 123:336227
 - TI Modulated expression of glycoprotein oligosaccharides identifies
 - phenotypic differentiation in squamous carcinomas of the human cervix
- AU Banerjee, Soumitra; Robson, Peter; Soutter, W. Patrick; Foster, Christopher S. CS Department of Pathology, Duncan Building, University of Liverpool,
- Liverpool, L69 3BX, UK
- SO Human Pathology (1995), 26(9), 1005-13 CODEN: HPCOA4; ISSN: 0046-8177
- PB Saunders
- DT Journal
- LA English
- L20 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Liposome having oligosaccharide on the surface
- AB The invention is related to a liposome as an adjuvant which is effective for somatic immunization and reduced in toxicity and antigenicity and can be administered to humans. The liposome comprises 2-11 saccharide residues and has on its surface an oligosaccharide which can combine with a lectin originating in an antigen-presenting cell, and a vaccine is prepared by enclosing an antigen in the liposome.
- AN 1995:733329 CAPLUS <<LOGINID::20080229>>
- DN 123:123168

- Liposome having oligosaccharide on the surface
- IN Hatanaka, Masakazu; Mizuochi, Tsuguo; Sugimoto, Masanobu; Ohishi, Kazue
- PA Tonen Corp., Japan
- SO PCT Int. Appl., 31 pp.
- CODEN: PIXXD2
- DT Patent LA Japanese
- FAN CNT 1

PAN.UNI I																		
	PATENT NO.				KIND DATE			AP:	APPLICATION NO.					DATE				
PI	WO	9511	704			A1	19	19950504		WO	WO 1994-JP1828					19941028		
		W:	CA,	US														
		RW:	AT,	BE,	CH,	DE,	DK, I	ES,	FR,	GB, G	R,	IE,	IT,	LU,	MC,	NL,	PT,	SE
	JP	0712	6185			A	19	9950	0516	JP	19	993-	2726	93		19	9931	029
	JP	2828	391			B2	19	9981	1125									
	CA	2152	917			A1	19	9950	0504	CA	19	94-	2152	917		19	9941	028
	EP	6772	95			A1	19	9951	1018	EP	19	94-	9311	86		19	9941	028
	EP	6772	95			B1	20	0050	0720									
		R:	DE,	FR,	GB,	IT												
	US	5759	572			A	19	9980	0602	US	19	95-	4813	00		19	9950	918
PRAI	JP	1993	-272	693		A	19	9931	1029									
	WO	1994	-JP1	828		W	19	9941	1028									

- L20 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
- Chitin and chitosan oligomers as hypolipemics and formulations containing them
- AB Hypolipemics containing chitosan/chitin oligomers were prepared A powder for oral administration containing chitohexaose 20 and lactose 280 mg was prepared At 240 mg/kg (orally, in mice), chitotriose decreased the blood cholesterol level by 66.2%.
- 1989:101787 CAPLUS <<LOGINID::20080229>> AN
- 110:101787 DN
- Chitin and chitosan oligomers as hypolipemics and formulations containing them
- IN Suzuki, Shigeo; Suzuki, Masuko; Katayama, Hitoshi
- PA Ihara Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 3 pp.
- CODEN: JKXXAF DT Patent
- LA Japanese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 63041422	A	19880222	JP 1986-184662	19860806		
	JP 06092308	В	19941116				
PRAI	JP 1986-184662		19860806				